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THE
PHILOSOPHY OF TRADE.

From the Author.

THE

PHILOSOPHY OF TRADE;

OR,

OUTLINES

OF A

THEORY OF PROFITS AND PRICES,

INCLUDING AN
EXAMINATION OF THE PRINCIPLES WHICH DETERMINE
THE RELATIVE VALUE

OF

CORN, LABOUR, AND CURRENCY.

BY PATRICK JAMES STIRLING.

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PREFACE.

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The following Essay is an attempt to solve some yet disputed problems in Political Economy, and impart a more regular and systematic form to the elementary principles of that science. It professes to give merely the outlines of a theory, and has no pretensions to be considered a practical treatise. I might perhaps, without much impropriety, have entitled it the *Physiology* of Trade; for my design is rather to describe the laws which regulate the operations of trade, in its healthy and unfettered state, than to discuss the origin, symptoms, and cure of those derangements to which it is subject from the action of extrinsic causes. Throughout the entire argument I have taken for granted that commerce is free from external interference of every kind, even from the influence of taxes imposed upon commodities for the sake of revenue. I have assumed that the sovereign power of a state in no case does more than afford protection to industry and security to property, preserving strictly the standard of money once established, enforcing covenants, and thereby maintaining credit; but leaving demand and supply to perform their appropriate functions, without restraint or encouragement.

The *disorders* incident to trade—a subject more nearly allied to politics—would require a separate and a larger volume. This comes not within the compass of my present design; and besides, it would be idle to attempt a treatise on those disturbances and convulsions to which commerce is occasionally liable, until I had submitted to public judgment my views (which are in some respects peculiar) of the laws which determine value, and govern the rise and fall of profits and of prices.

The *manner* in which this subject has been treated in the following pages is, I am aware, somewhat unusual; but if the outline which I have endeavoured to sketch appears harsher and more rigid than even outlines commonly are, let me say in self-defence that it seems almost impossible to write a discourse upon the theory of trade in such a way as to render the subject attractive to readers in general—at least to that large class of readers who have recourse to books for mere amusement or as the materials of conversation. Every attempt of the kind that has yet been made—and such attempts have been frequent and of great ability—has signally failed. Nor have these popular efforts been without injury to the cause they were intended to serve. Hutcheson, and, after him, Smith, Paley, Dugald Stewart, and Mackintosh, assigned to Political Economy a high place among the Moral Sciences, and if this fertile field of useful inquiry, in which Locke and Montesquieu laboured, is still to retain its place in the domain of science (which some modern writers have affected to doubt), there seems no reason why one corner alone of a region to which proverbially there is no royal road, should be approached by a path whimsically strewed with artificial flowers.

I have not even attempted to treat the subject in that manner; but, in order to make the reasoning as obvious as possible to those less conversant with such discussions, I have divided the work, and especially the more abstruse portions of it, into a number of very short chapters, prefixing to each an epitome of the argument, most frequently in the form of an abstract proposition;—although, after all, I am doubtful whether the attention of the careless or desultory reader can be secured, or relieved, by the aid of such *mechanical* expedients.

Of the *matter* and substance of the work itself it becomes me to speak and to think with great humility; for at this moment there is perhaps no subject more discouragingly, if not hopelessly, beset with difficulty, than the first principles of economical science. Even Adam Smith does not venture to approach that part of his immortal *Inquiry into the Nature and Causes of the Wealth of Nations*, without pausing to bespeak his readers' "earnest attention to a subject in its own nature extremely abstracted." They who have attended to this subject most, can best appreciate its difficulties. For myself, I can only say, that the arduous work which

I have presumed to undertake, I have tried to execute honestly and in good faith. Where-ever Truth has appeared to lead, I have endeavoured resolutely but reverentially to follow; though, by pursuing this course, I have frequently arrived at conclusions which, whether right or wrong in themselves, are at variance with opinions generally received on the authority of distinguished names.

It is not for me to appropriate the language of Montesquieu, or I might add with truth, in the words of the preface to his great work, " J'ai bien des fois commencé, et bien des fois abandonné cet ouvrage;......je ne trouvois la vérité que pour la perdre: *mais quand j'ai découvert mes principes, tout ce que je cherchois est venu à moi.*"

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BOOK I.

OF VALUE.

THE
PHILOSOPHY OF TRADE.

BOOK I.

OF VALUE.

CHAPTER I.

Parts of a commodity cannot rise or fall in value in respect of each other.

CHAP. I.

If we compare the value of a *part of any commodity* with the value of *another part* of the *same commodity*, we shall find that the *value* of *each* part in relation to every other part is *greater* or *less* according as its *quantity* is *greater* or *less*. Hence *equal parts* of a commodity are, in *respect of each other*, of *equal value*.

One quarter of *wheat*, of known weight and

BOOK I.

quality,* is of equal value with *any other* quarter of *wheat* of the same weight and quality, that is to say, the one *can be exchanged* for the other *without either loss or gain.* *One* ounce of *pure gold* is of equal value with any other ounce of pure gold, two ounces have *double* the value of *one* ounce; half an ounce *one-half* that value, and so on.†

---

* I use the word *commodity* to signify a subject of exchange which is *homogeneous* or uniform in quality. Parts of a commodity which differ in *quality* must be regarded and reasoned upon as distinct commodities.

† This proposition may seem at first sight to be a mere *truism ;* but it is in truth an important elementary principle, from which Mr Locke has deduced the great practical conclusion, that " *one metal alone can be the money of account and contract and the measure of commerce in any country.*" He says, " Rising and falling of commodities is always between several commodities of distinct worths. But nobody can say that tobacco (of the same goodness) is risen in respect of itself. One pound of the same goodness will never exchange for a pound and a quarter of the same goodness. And so it is in silver; an ounce of silver will always be of equal value to an ounce of silver, nor can it ever rise or fall in respect of itself." And again, " Two metals, as gold and silver, cannot be the measure of commerce both together in any country, because the measure of commerce must be perpetually the same, invariable, and keeping the same proportion in all its parts; but so only one metal does, or can do, to itself;

Nor does it make the slightest difference *in this respect* whether the *whole* supply of *wheat* in the market be *fifty* quarters or *fifty millions* of quarters, or whether the *whole* supply of *gold* be one thousand ounces or one thousand tons; the *value* of *each part of each* commodity in relation

so silver is to silver, and gold to gold; but gold and silver change their value one to another, for supposing them to be in value as sixteen to one now, perhaps the next month they may be as fifteen and three quarters, or fifteen and seven-eighths to one. And one may as well make a measure, namely, a yard, whose parts lengthen and shrink, as a measure of trade of materials that have not always a settled invariable value to one another."—See Locke's *Further Considerations concerning raising the Value of Money*, *Works*, vol. ii. p. 72 (fol. edit. 1722). The same principle is noticed by Sir W. Petty, *Political Anatomy of Ireland*, ch. 10; and by Mr Harris in his *Essay on Money and Coins*, Part I. p. 57. A practical suggestion, founded on this view of the subject, made by Adam Smith, *Wealth of Nations*, b. i. ch. 5, was afterwards adopted, and pressed upon the attention of government by the late Earl of Liverpool, in his *Treatise on the Coins of the Realm*, p. 13. But it was not till 1816 (by statute 56 Geo. III. c. 68), more than ten years after the publication of Lord Liverpool's treatise, that this fundamental principle was *acted upon*, and gold made, practically and in reality, the sole standard measure of commerce, which it certainly was *not* while the silver coin was legal tender, by tale, to the amount of £25, and by weight, at the mint price, for any greater sum.

to *every other part of the same* commodity will still be in direct proportion to its *quantity.*

A commodity cannot rise or fall in value except in relation to *some other* commodity by which its value is measured—a commodity cannot rise or fall in value in relation *to itself.*

CHAPTER II.

The value of one commodity in relation to another, or the quantity of one commodity for which a determinate portion of another will exchange, is less or greater according as the total supply of the one commodity is increased or diminished in proportion to the total supply of the other.

LET *gold* and *hops* be two commodities, and let one of them be employed to measure the rising and falling value of the other. The value of a given quantity of hops, estimated in gold, or the quantity of gold for which such given quantity of hops will exchange, will be less or greater according as the total supply of hops bears a greater or less proportion to the total supply of gold; and the value of a given quantity of gold, estimated in hops, or the quantity of hops for which such given quantity of gold will exchange, will be determined by the same proportion.

If, when the total supply of hops in the market is 30 millions of pounds, *one* pound will exchange for *six* grains of pure gold, it is certain that the *same* quantity of *hops* will exchange for a *smaller* quantity of *gold*, should the supply of hops be increased to 40 millions of pounds, and for a still smaller, should the quantity be increased to 50 or 60 millions of pounds.

Were the supply of hops, on the contrary, reduced to 20 millions of pounds, *one pound* would, for the same reason, exchange for *more* than *six grains* of pure gold, and if to 10 millions of pounds, for still more.

The value of *every pound* of hops, estimated in gold, is thus seen to depend upon the total quantity of hops in the market: if one pound exchange for six grains of gold when one pound forms a 30-millionth part of the supply, it will exchange for *less* when it forms a 40 or 50-millionth part, and for *more* when it forms a 20 or 10-millionth part.

But the value of hops estimated in gold, and of gold estimated in hops, may *also* be altered by an increase or diminution of the quantity of gold, *without* any augmentation or abridgment of the quantity of hops. If six grains of gold will exchange for one pound of hops when the total supply of gold is 100 millions of grains, the same quantity of gold will exchange for a smaller quantity of hops when the supply of gold is increased to 200 or 300 millions of grains, the supply of hops remaining unaltered. Hops estimated in gold will become dearer, gold estimated in hops will become cheaper than before, and that in proportion as six grains become a smaller fractional part of the whole supply of gold.

On the other hand, if the supply of gold be reduced to 60 or 80 millions of grains, six grains will exchange for more hops than before. Hops estimated in gold will become cheaper, and gold estimated in hops will become dearer than before, and that in proportion as six grains become a larger fractional part of the whole supply of gold.

And it follows as a corollary from the above, that the quantities of gold and hops may be *both* so increased or *both* so diminished, that six grains of the former will, after such contraction or expansion of the supply of both, still exchange for one pound of the latter.*

---

* This last is a consideration of great importance; and, from not attending to it, the Earl of Lauderdale was led to affirm that "an *increase of riches*, when arising from alterations in the quantity of commodities, is always a proof of the immediate *diminution of wealth*; and that a diminution of riches is evidence of an immediate increase of wealth;" and, that "in proportion as the riches of individuals are increased by an augmentation of the value of any commodity, the wealth of the nation is generally diminished; and in proportion as the mass of individual riches is diminished by the diminution of the value of any commodity, the national opulence is generally increased." This melancholy paradox Lord Lauderdale maintained stoutly in a set treatise.—See *Inquiry into the Nature and Origin of Public Wealth, by the Earl of Lauderdale*, edition 1804, p. 50. Mr Ricardo has given a masterly exposition of the "Distinctive Properties of Value and Riches," in the 20th chapter of his celebrated work *On the Principles of Political Economy and Taxation*, 3d edition, p. 320.

CHAPTER III.

A commodity possessed of exchangeable value can alone form a measure of the value of other commodities. Distinction between value and price.

THE argument of the last chapter rests on the basis of facts which will not be disputed. The value of *money*, or that commodity which is employed as a *common measure and equivalent*, as well as a medium of exchange, is determined by the proportion which the whole amount of money in circulation bears to the whole amount of the commodities to be exchanged. If the volume of the currency be enlarged without a corresponding increase of commodities, the *money-price* of every commodity, or *its value in relation to money*, will rise. But if so, the same effect will be produced by diminishing the quantity of the commodity, without a corresponding reduction of the circulation. Again, if the volume of the currency be contracted without a corresponding diminution of the quantity of commodities, the price of every commodity, or its value in relation to money, will fall. But if so, the same consequence will follow from increasing the quantity of the commodity, the circulation remaining of the same absolute amount as before.

These are necessary deductions from the acknowledged truth, that the value of money is determined by the ratio of money to commodities, for this ratio may be as effectually altered by increasing or diminishing the quantity of commodities, the amount of the circulation remaining the same, as by diminishing or increasing the amount of the circulation, the quantity of commodities remaining the same.

We find, accordingly, that these deductions are in complete accordance with other facts which fall under our daily observation. A plentiful harvest, a plentiful supply of corn, of indigo, raw cotton, hops, &c., invariably reduces the price of such produce; while a scanty supply enhances that price.

It is important to remember, that the foundation of all commerce is *barter*, or the *exchange of one commodity for another*. The introduction of *money* does not change the essential nature of trade, for although money is rightly said to be a *common measure of property*, it must never be forgotten that, from the very *nature of the thing*, nothing *can* be a measure of value or of property which is not itself an *equivalent* possessed of exchangeable *value*.

The precious metals are indisputably the fittest standards for measuring the value of all other commodities, for this reason, among many others, that their supply is *more* uniform, their quantity *less* subject to variation, than that of any other commodities with which we are acquainted. Gold and silver, like all other things, are sometimes scarcer and sometimes more plentiful; and we know, historically, that after the discovery of the American mines, in the sixteenth century, the enlarged supply of the precious metals reduced their value all over the world. It is not, therefore, because the supply of gold and silver is *invariable*, but because it is *less variable*, especially within short periods of time, than the supply of other commodities, that trade has adopted one or other of these metals as a universal equivalent and measure of value.*

The person who *gives a commodity* in exchange for *money*, is said to *sell* the commodity; and one who *gives money* in exchange for a commodity, is said to *buy* the commodity.

In the language of trade, a commodity is said to be more or less valuable, in proportion as it will exchange for more or less money; and the money for which it is exchanged is called its *price.*

But *price* and *value* are different things, and the least reflection will show us that while a commodity, at the same time and place, can have but *one price*, it may have, and it has in reality, as many values as there are other commodities in the market in which its value can be estimated. If the price of a quarter of wheat, for example, be 246 grains of standard gold, or two pounds sterling, the price of a hat 123 grains, or one pound sterling, and the price of a yard of broad cloth 61½ grains, or ten shillings sterling, then the value of a hat is double that of a yard of cloth, and one half that of a quarter of wheat. Each commodity has but one *price*, but the *value* of a quarter of wheat, estimated in hats, is two hats, and in broad cloth four yards; and were there a thousand, or ten thousand, other commodities in the same market, we should have a thousand or ten thousand other measures of the value of these three commodities, and of each of the thousand or ten thousand commodities besides. And in order to be able to apply these measures, all that we need to know is the quantity of gold for which a certain quantity of each commodity will sell or exchange.

---

* In reasoning on the subject of value, we shall sometimes find it necessary to adopt a similar expedient, and to *assume* some one commodity (gold, for example) to be invariable in its supply, and a perfect measure of the rising or falling value of all other commodities; reserving this one commodity for separate consideration afterwards, as itself subject to fluctuations, and measured, in its turn, by the other products for which it is exchanged.

The *price* of a commodity is altered by changing the *ratio* of its quantity to the quantity of money in circulation; its *value* is altered by the augmentation or abridgment of the supply of any other commodity in the market.

CHAPTER IV.

Par of value. The entire products of equal capitals are intrinsically of equal value; and their actual value in the market always tends to par or equality. The intrinsic value of a determinate portion of one such product in relation to a determinate portion of another, is less or greater according as the whole quantity of the one product bears a greater or less proportion to the whole quantity of the other product.

SUPPOSE three capitalists each to employ a capital of 1000 quarters of wheat, one in the maintenance of agricultural labour, and the other two in the maintenance of mining or manufacturing labour; and that the first capitalist obtains an average return of 1200 quarters of wheat, the second a return of 600 ounces of gold, and the third a return of 9000 ounces of silver. The agriculturist will not exchange his product of 1200 quarters of wheat for *less* than 600 ounces of gold, because by devoting his capital of 1000 quarters to the production of gold, instead of to the production of wheat, he could himself obtain 600 ounces of that metal. On the other hand, the producer of gold will not give *more* than 600 ounces of that metal for 1200 quarters of wheat, because *he* could obtain that quantity of corn by employing his capital directly in agriculture. Nor, for the same reason, will the producer of wheat or gold exchange 1200 quarters of wheat or 600 ounces of gold for *less* than 9000 ounces of silver; for either of these capitalists, by transferring his capital to the production of silver, could obtain 9000 ounces; and the producer of silver will not give *more* than 9000 ounces of that metal for 600 ounces of gold, or 1200 quarters of wheat, because he could himself produce these quantities of either by transferring his capital to the production of these commodities.

The value of wheat in relation to gold, would under such circumstances be as 1200 to 600, or in the proportion of 2 quarters of wheat for one ounce of gold; the value of wheat in relation to silver would be as 1200 to 9000, or in the proportion of one quarter of wheat for 7½ ounces of silver; while the value of silver in relation to gold would be as 9000 to 600, or in the proportion of 15 ounces of silver for one ounce of gold. Exchanging with each other in these proportions, the value of these three commodities may be said to be *at par.**

Now, let the quantities of gold and silver produced from the same equal capitals be each *doubled*, the value of gold and silver in relation to corn will sink by *one-half*; for the agriculturist, under such altered circumstances, can obtain by the employment of his capital in the one department 1200 ounces of gold, or by the employment of it in the other 18,000 ounces of silver. He will not, therefore, exchange his

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* *Par of value*, though a novel, will I hope not be considered an inappropriate phrase. *Natural price*, *real value*, &c., do not so clearly express the idea which I wish to convey. I have never in any instance substituted a new term for one already in use where the latter appeared to be sufficiently precise.

1200 quarters of wheat for *less* than double the former quantity of either of the precious metals. Nor could the producers of these metals fairly demand *more* than 1200 quarters of wheat for their products respectively, for by employing their capitals in agriculture neither of them could still obtain a greater return than 1200 quarters.

The value of corn in relation to gold would now be as 1200 to 1200, or in the proportion of one quarter of wheat for one ounce of gold; the value of corn in relation to silver would be as 1200 to 18,000, or in the proportion of one quarter of wheat for 15 ounces of silver; while the value of silver in relation to gold would still be as 1200 to 18,000, or in the old proportion of one ounce of gold for 15 ounces of silver. Produced under such altered conditions, and exchanging in such altered proportions, the value of the three commodities in relation to each other might still be said to be *at par*.

Again, let the average quantity of corn produced by the employment of a capital of 1000 quarters be *doubled*, the returns in gold and silver from equal capitals being respectively 600 and 9000 ounces, as before; the value of corn, in relation to the precious metals, will be reduced *by one-half*, for the producer of gold will not exchange 600 ounces of gold, or the producer of silver 9000 ounces of that metal, for *less* than 2400 quarters of wheat, when either, by transferring his capital to agriculture, could obtain that return. Nor could the agriculturist fairly demand *more* than these quantities of gold or silver in exchange for 2400 quarters, for by transferring the capital of 1000 quarters, which now yields him that increased return, *from* agriculture to mining, he could still obtain no greater return than 600 ounces of gold or 9000 ounces of silver.

The value of corn in relation to gold will now be as 2400 to 600, or in the proportion of four quarters of wheat for one ounce of gold; and the value of corn in relation to silver will be as 2400 to 9000, or in the proportion of one quarter of wheat for 3¾ ounces of silver.

Once more, let the quantities of corn, silver, and gold be *all* doubled, and there shall be no change whatever in their relative value; in other words, the original par of value will be restored; for the value of corn, in relation to gold, will be as 2400 to 1200, or as two quarters for one ounce; the value of corn, in relation to silver, will be as 2400 to 18,000, or in the proportion of one quarter for 7½ ounces; and the value of silver in relation to gold will be as 15 to 1.

Thus it appears, that the three capitals being of equal value, *i. e.* exchangeable, the one for the other, without loss or gain, the entire products of each of these three capitals will naturally exchange the one for the other; and that the quantity of any one of these products for which a determinate portion of any other will exchange, will be less or greater, according as the whole quantity of the one product is greater or less in proportion to the whole quantity of the other.

Such would appear to be the principle by which the *natural* or *intrinsic* value of commodities, in relation to each other, is fixed and determined. But the *actual market* value of a commodity at a particular time and place is often different from this natural or intrinsic value. When one ounce of gold and 15 ounces of silver are the products of equal capitals, these metals, as already shown, will naturally exchange for each other, in the proportion of 15 ounces of the latter for one ounce of the former; at least the producer of gold will not *continue* to give more than one ounce of gold for 15 ounces of silver, or the producer of silver *continue* to give more than 15 ounces of that metal for one ounce of gold; and for this reason, that either producer can, by the employment of an equal capital in the other department, obtain an equal return.

In such circumstances, and when gold and silver actually do exchange in the proportion of 15 to 1, the value of the two metals in relation to each other may be said to be *at par*, and the market and natural values coincide; but if there happen at any time to be, upon the whole, *less* gold in the market than the wants of society require, the producer of silver may, for a time, consent to give more than 15 ounces of that metal for one ounce of gold; or if, on the other hand, there should happen to be more gold in the market than is wanted, the producer of that metal may be contented to take *less* for one ounce of it than 15 ounces of silver.

Such *disturbances* of value arise sometimes from extrinsic circumstances affecting the demand, as from a mere change of taste or inclination on the part of the consumer; and it is impossible in any case to estimate exactly the extent of their influence. The two subjects of every exchange, whether it be an exchange of one commodity for another, or of a commodity for money, are of course under the control of the parties making the exchange; and, according as it happens to be an object of greater or less urgent importance for one of these parties to obtain a certain portion of a particular commodity, more or less of another will be given for it. But such disturbances, whatever be their extent, cannot be permanent; for the moment the price of a commodity is raised above or sunk below the natural level or *par*, additional capital will be transferred to its production from other departments; or a part of the capital already employed on its production will be withdrawn—the supply will in consequence be increased or diminished—and the price, whatever it be, will fall or rise till the former level is regained.

But the main cause of such disturbances of value is the occasional employment of too much or too little capital in certain departments of production. To revert to our former illustration, the value of gold and silver in relation to each other will deviate from par when the *total* quantity of the one metal bears a less or greater proportion to the *total* quantity of the other, than the *quantity of the one produced from a given capital* bears to the *quantity of the other produced from an equal capital.* For example, 600 ounces of gold and 9000 ounces of silver are supposed to be the products of equal capitals; but the *total* quantity of gold produced *at this rate* may be represented by 60,000; and the total quantity of silver produced at this rate may be represented, not by 900,000, but by 1,800,000, in which case the *actual* value of the two metals, in relation to each other, in the market, would not be at par (or in the assumed proportion of 15 to 1), but might be in the proportion of 30 to 1.* Silver, by this increase of the *total* supply, having sunk in value in relation to gold, and every other commodity, capital would be immediately withdrawn from the production of silver; the supply of that metal would in consequence be abridged; and when reduced again to 900,000 ounces, then the actual market value would coincide with the natural value, and the value of the two metals in relation to each other would be again at par.

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* I say *might be*, because, as already stated, it is impossible in any case, *a priori*, to estimate with exactness the degree of effect which such disturbances will produce. If double

Again, if the total supply of gold (the rate of production from equal capitals being as formerly in each case) were represented by 60,000 ounces, and the total supply of silver by 450,000, instead of 900,000 ounces, in this case the

the usual quantity of merchandise is brought to market, it does not follow that the price will be reduced exactly one-half; or that if only one-half the usual quantity is supplied the price will be raised twofold. The proportional differences will depend upon whether the article is a luxury or a necessary, of a durable or perishable nature, portable or bulky, of partial or general use, &c. Thus, an excess in the importation of ripe oranges will occasion a much greater fall than the same excess in the importation of wool or timber, and still more than a similar excess in the supply of silver, cochineal, or any other article which can be easily re-exported. Again, in the case of corn, it is well known that a deficient or abundant harvest produces a rise or fall of price not at all in proportion to the actual deficiency or excess.

actual value of the two metals in relation to each other in the market would not be at par (or in the proportion of 15 to one); but might be in the proportion of 7½ to one. Silver, by this diminution of the *total* supply, having risen in value in relation to gold and every other commodity, capital would be immediately attracted from other departments to the production of silver, the supply of that metal would in consequence be increased, and when doubled or increased again to 900,000 ounces, the actual market value would again coincide with the natural or intrinsic value, and the value of the two metals in relation to each other would again be at par.

It is unnecessary to multiply examples—similar results, *mutatis mutandis*, would follow from the enlargement or contraction of the relative supply of gold or of any other commodity. The actual value of commodities in the market depends on the proportion between their *total* quantities; the natural or intrinsic value depends on the proportion between the quantities of each produced from equal capitals. The market and natural value may seldom exactly coincide, but their *tendency* is always towards equality, for no deviation, either on the one side or on the other, can take place without calling into action a principle by which such deviation will be ultimately corrected.

CHAPTER V.

Utility is neither a measure nor constituent of exchangeable value.

BOOK I.

A COMMODITY *without* utility or some other desirable quality is not *exchangeable*, and consequently does not come within the limits of the science of value, which treats not of things which are *extra commercium.* Every thing *exchangeable* or *valuable* must possess *utility*, or some other quality which renders it *saleable* or *marketable;* but the *converse* does not hold, for there are many things which are *useful* yet are *not commercially valuable* or *exchangeable.* Utility, therefore, is a quality inherent in exchangeable commodities, just as length, breadth, or the capacity of being measured, are qualities inherent in them; but utility is no more a measure or constituent of commercial value than any other quality or attribute of commodities.

Nature has furnished some things of highest utility in quantities so abundant as to destroy their exchangeable value altogether. The air we breathe, for example, is commercially *valueless*, and the reason is that the supply is *boundless*. For the same reason water, which is equally essential to human life, ordinarily brings no price; but in situations where the supply is limited, the *limitation* makes it valuable, and it will fetch a price higher or lower in proportion to its scarcity.

CHAPTER VI.

The high value of commodities produced under a natural or artificial monopoly is caused by a limitation of the supply.

BOOK I.

Of another class of commodities the supply is limited by nature, as for example, some rare wines, the growth of particular vineyards. The value of such commodities is regulated by the same law, their limited quantity renders them valuable; but it is certain that were other soils and situations discovered capable of producing grapes of the same kind, the price of such wine would fall in consequence of the more abundant supply.

There are other commodities still more strictly limited, as the pictures of the old masters, ancient statues, coins, manuscripts, &c. Such things are justly said to be "rare and valuable," for as applied to them these words may be regarded as synonymous.

The supply of a third class of commodities is limited by the municipal law of states, and the operation of monopolies. There being no competition, the monopolist is enabled to keep the market understocked, and the price is by this means artificially elevated.

CHAPTER VII.

The value of freely produced commodities is governed by the same law, but competition prevents the producer of such commodities from limiting the supply beyond a certain point. Demand and supply—Natural and market price—Dr Adam Smith's theory—Difficulties which attend the application of that theory to the observed phenomena of trade and exchanges.

THE supply of by far the greater number of commodities may be enlarged to an almost indefinite extent by the application of human labour, machinery, and capital to their production. The quantity of such commodities must be so regulated that their value, when sold or exchanged, shall be equal to their cost, including the usual profits of the capital employed in their production.

The market price of commodities is regulated by the proportion between the *supply* and *demand.* This has been called an axiom in political economy.

Adam Smith has made a distinction between the *market price* and the *natural price* of commodities. In every society there is, according to Dr Smith, an average or natural rate of *wages*, *profits*, and *rent*, which he represents as the three component parts of price. The *market price* is the *actual* price for which a commodity is commonly sold; whilst the *natural price* is that which is exactly sufficient to pay the rent,* wages, and profits employed in raising and preparing the commodity, and in bringing it to market.

The market price, according to this theory, is regulated by the proportion between the quantity brought to market and the demand of those who are willing to give the natural price. When the supply falls short of the demand, all those who are willing to give the natural price cannot be supplied; a competition begins among the demanders, and the market price rises above the natural price. And, on the other hand, when the supply exceeds the demand, the whole quantity cannot be sold to those who are willing to give the natural price, a competition begins among the sellers, and the market price falls below the natural price. In this way the supply naturally suits itself to the demand.

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* *Rent*, as we shall afterwards see, never enters into or influences price.

When, by an excess of supply, the market price of a commodity falls below the natural price, the trade in that commodity becomes unprofitable; a part of the supply is withdrawn, and the market price again rises to the natural price. When, on the contrary, through a diminished supply, the market price of a commodity exceeds the natural price, the trade in that commodity is more than usually profitable, additions are made to the supply, and the market and natural price again coincide.

" The natural price, therefore," says Adam Smith, " is, as it were, the central price to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep them suspended a good deal above it, and sometimes force them down even somewhat below it. But whatever may be the obstacles which hinder them from settling in this centre of repose and continuance, they are constantly tending towards it." *

The theory of which we have here given a brief account, or rather the practical application of that theory to the observed phenomena of trade and prices, is not unattended with difficulty. At present we have nothing to do with the component parts of the natural price of commodities, and this, therefore, is not the place to notice the objection which has been justly made by more recent authors to Adam Smith's including *rent* as one of the elements of price. Our sole concern at present is with his account of the *mode* in which the *market price* is *adjusted* to the *natural price.*

One great difficulty which attends Adam Smith's theory arises from his not defining the term *demand*,—a term which it is perhaps impossible to define with strict accuracy. Prices are said to be raised or depressed by adjusting the quantity to "the demand of those who are willing to pay the natural price of the commodity." This gives us no clear or definite idea of one, and perhaps the more important, of the two elements of the adjustment. And we must therefore attempt to carry the analysis farther, in order if possible to discover what demand really is, and what are the laws which regulate its extent and intensity.*

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* Wealth of Nations, book i. ch. vii.

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* M. Say explains this subject more fully and intelligibly than our own illustrious countryman, though his doctrine, "*que c'est la production qui ouvre des débouchés aux produits,*" has at first sight somewhat the air of a paradox. I quote the two following passages from Say's chapter, *Des Débouchés* :—

" It is worth while to remark, that a product is no sooner created, than it, from that instant, affords a market for other products to the full extent of its own value. When the producer has put the finishing hand to his product, he is most anxious to sell it immediately, lest its value should vanish in his hands. Nor is he less anxious to dispose of the money he may get for it; for the value of money is also perishable. But the only way of getting rid of money is in the purchase of some product or other. Thus, *the mere circumstance of the creation of one product immediately opens a vent for other products.*"

" Should a producer imagine that many other classes, yielding no material products, are his customers and consumers equally with the classes that raised themselves a product of their own; as, for example, public functionaries, Demand has been said to be "the will to purchase combined with the means of purchasing,"[*] and is represented as being limited "by the numbers, wants, and means of the demanders."[†] This account of demand does not make the meaning of the term clearer. To say that a commodity is calculated, in a greater or less

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physicians, lawyers, churchmen, &c.; and thence infer that there is a class of demand other than that of the actual producers, he would but expose the shallowness and superficiality of his ideas. A priest goes to a shop to buy a gown or a surplice; he takes the value that is to make the purchase in the form of money. Whence had he that money? From some tax-gatherer, who has taken it from a tax-payer. But whence did this latter derive it? From the value he has himself produced. This value, first produced by the tax-payer, and afterwards turned into money, and given to the priest for his salary, has enabled him to make the purchase. The priest stands in the place of the producer, who might himself have laid out the value of his product on his own account in the purchase, perhaps not of a gown or surplice, but of some other more serviceable product. The consumption of the particular product, the gown or surplice, has but supplanted that of some other product. *It is quite impossible that the purchase of one product can be effected otherwise than by the value of another.*"—*Say's Political Economy*, book i. ch. xv.

[*] Malthus' Principles of Political Economy, 2d Edition, p. 63.

[†] Ibid. p. 64.

degree, to meet the wants and wishes of those who have " the will to purchase combined with the means of purchasing," or that it is more or less adequate to the " numbers, wants, and means of the demanders," is not a whit more intelligible than merely to say that it is *more or less in demand.* We have more words, but no real accession to our knowledge, and are as ignorant as ever how far the value of all commodities, or of any one commodity, is affected by the numbers, how far by the wants, and how far by the wealth and riches of the purchasers.

Another difficulty attends Adam Smith's theory of demand and supply. The *fact* upon which that theory is founded is *indisputable,* namely, that *price* is regulated by relative *quantity;* but it is not easy to discover how, *practically,* the quantity of each commodity *can* be so limited and *adjusted to the demand* as to produce the natural price, and no more. We seldom hear of such artificial adjustments being successfully effected. And any one who considers how many commodities, both of foreign and domestic production, are every year, or rather every month, every day, and every hour, demanded for the subsistence, the comfort, the enjoyment, and luxury of the people of this or any other great country; how much is spent in the purchase of dress, furniture, equipage, plate, and the other infinitely varied articles of taste, ornament, and splendour which we see exhibited in the shops and markets of our great towns; how capricious are the tastes of the purchasers; how wanton and frequent the changes of fashion, and yet with what precision and regularity the supply is accommodated to the demand, the market neither overstocked nor understocked, and the price in almost every department kept at its proper level,—any one who considers this will probably see reason to doubt how far it is *possible* for our manufacturers, merchants, and agriculturists, with all their acknowledged skill and intelligence, and with all the shiftings of employment and transferences of capital which the theory we are considering supposes and requires, so to adjust the supply of their respective products to the demand which from time to time may exist for these products, that the market price of each commodity shall coincide with the natural price, and be equal, and no more than equal, to the cost of production, including the common and ordinary rate of profits.

In order to account for all this, it is necessary to have recourse to another principle, which, although perfectly understood in practice, has hitherto been little noticed by speculative writers on trade.

CHAPTER VIII.

An attempt to remove these difficulties. Price regulates consumption. This illustrated in the case of commodities produced under a monopoly and in departments where competition does not freely operate.

SUPPOSE a manufacturer to be in possession of a secret for dyeing cloth of a particular colour. The cost of the dye-stuff we may suppose to be trifling; but while the manufacturer keeps his secret, he has a strict monopoly, and consequently cannot be undersold by any competitor. There is nothing, therefore, to hinder his fixing his own price for his commodity. He accordingly names his price, and refuses to sell his cloth under that price.

By this means the manufacturer will very soon discover how great or how small a quantity of his commodity he can sell at this price in a given time. If the price fixed be high, he will probably sell but little, and although the *rate* of his profits may be exorbitant, he will soon find that his *gains* on the whole will be greater by reducing his price and enlarging his trade.

Should he find that his returns go on increasing, he will go on reducing his price and extending his sales till his profits are only a little higher than the ordinary or average rate in other departments of production. At that point he will stop.

By successive reductions of the price, he has fairly *tested* the extent and intensity of the demand. He will therefore reduce his price no farther, and the supply of his commodity will be no farther enlarged. At every stage of this experimental process, the producer is enabled to discover with exactness what quantity of his commodity he must manufacture and bring to market in a given time, to be disposed of at the price and with the profit he wishes to obtain. He discovers what quantity is sufficient to meet the demand of those who are willing to pay the price he has fixed for his monopolized commodity.

The same principle will be found to operate in other departments. That the number of letters transmitted by post is augmented by every successive reduction of postage; that the number of passengers who travel by a railway goes on increasing with every successive reduction of fares; that the quantity of gas consumed in any town is increased by successive reductions of its price; that the amount of a banker's issues are increased by reducing the rate of interest charged upon bills; and that the consumption of taxed commodities is augmented by every reduction of duty, are results which fall under our daily experience. And the important principle to be extracted from these results is this, that the larger or smaller quantity of any commodity brought to market will not more certainly regulate and fix its price at that time and place, than the price of the commodity, whether high or low, if maintained for a certain time, will regulate and fix the quantity which can be sold in that time. Quantity regulates price; but price in its turn may also be made to regulate quantity.

CHAPTER IX.

The same principle operates, to a certain extent, in the case of freely produced commodities, and enables the producer to adjust the supply to the demand.

To illustrate this, suppose that a manufacturer, when common and average profits are at ten per cent., employs L.1000 in the production of *hats*, and that for this sum he can produce 1100 hats. It is obvious that he cannot afford to sell these hats for less than L.1 each, making the return on the whole L.1100, viz. L.1000 to replace his capital, with L.100, or ten per cent., profits.

According to the theory of Adam Smith, it would seem that this hat-maker and all other hat-makers must endeavour as they best can so to limit and adjust, not only the total number of hats manufactured, but the number of each kind to the tastes and means, the wants and riches of the demanders, that the price of each hat shall amount to exactly L.1, leaving all deviations from this the natural price to be corrected by some of the manufacturers withdrawing from the trade, or withdrawing capital from it, when, by reason of excessive supply, the price sinks below L.1, and by others entering into this trade, or embarking additional capital in it, when, through a deficient supply, the price rises above L.1. But it seems impossible that the price could be adjusted, or, if adjusted, that a deviation of the market from the natural price could be corrected, with any degree of exactness, in the mode here indicated. On the other hand, the manufacturer, by *maintaining* the natural price, that is, by refusing to part with his hats for less than L.1 a-piece, is enabled to discover *how many* he can dispose of *at this price* in a *certain time*, and to regulate the rate of his production accordingly.

When the market price of a commodity is above the natural price, competition will instantly reduce the price, and the *reduction of* *price* will enlarge the consumption, and make room for an additional supply, as effectually as an enlargement of supply would lower the price; while, on the contrary, an *elevation of the price* will as effectually limit consumption and check the supply as an abridgment of the supply would raise the price. It is *thus* apparently that competition operates in most instances, and especially in the case of manufactured products, the supply of which may be enlarged almost indefinitely. Demand and supply are in all cases *the agents* in the ultimate regulation of price and value, and it will presently be seen that, when the market is once overstocked, natural prices cannot be maintained; but it seems impossible that the market should *ever be otherwise* than overstocked or understocked were there no *gauge* by which to test the extent and intensity of the demand. Were there no index, no guide, such as we have endeavoured to describe, trade would be nothing better than a series of uncertain experiments, and, after all, no possible exertion of human ingenuity could so exactly adjust production to consumption, supply to demand, as that the resulting price should be equal, and no more than equal, to cost and profits.

But, it may be asked, if supply be adjusted to the demand in the mode which has just been described; if the producer, and not the consumer, has the power to fix the price, why should the market ever be glutted with commodities? Why should there ever be a bankruptcy? And above all, why should we ever hear of commodities being sold under their cost price? To answer these questions satisfactorily, it is only necessary to extend a little farther the illustration we have adopted.

In the instance we have supposed, the manufacturer, by maintaining his price, cannot, we assume, dispose of more than 1100 hats in one year. Had the price of each been ten shillings instead of one pound, he might probably, from the more enlarged demand, have disposed of the same number in six months, or perhaps in three; or had the price of each been two pounds, it might possibly have taken eighteen months, or perhaps two years, to dispose of 1100. By hypothesis, the price is one pound, and the period one year.

But we shall suppose that instead of having the L.1000 capital of his own, the manufacturer borrows it, and has to repay it at the end of six months. This obliges him to force his goods into the market; and instead of price being the regulator of quantity, quantity now becomes the arbiter of price. His stock is sold for whatever it will bring; and the price which it does bring is very likely insufficient to pay either cost or profit.

Here, then, we have an answer to the questions of the supposed objector. We have a glut in consequence of double the quantity of goods being forced into the market within the six months—we have these goods sold below their cost price—and we have the consequent bankruptcy of the manufacturer.

CHAPTER X.

That demand is in all cases limited, is proved *by the fact that prices and profits, if above the average in certain departments, may be brought down to the common level by transferring capital to such departments and enlarging the supply.*

WHATEVER theory we adopt, and whatever demand be in itself, one thing is sufficiently obvious, that demand, in every country, and in all states of the market, is *limited*, or what comes to the same thing, is less flexible, less capable of expansion than supply.

According to Adam Smith's theory, if a manufacturer should sell his goods at a price more than sufficient to replace his capital with the ordinary profits, additional capital will be attracted to that department of production, and this additional capital, by *increasing the supply*, will bring down prices and profits to their average level.

But *this very fact* PROVES that demand is *limited.* Did demand and supply expand together, and in the same proportion, *no* augmentation of supply *could* depress prices; for observe *how* the increase of supply operates to depress prices. The enlargement of supply, *when unaccompanied with a corresponding extension of demand, alters the ratio* between supply and demand; and it is *this alteration of the ratio* which is the proximate and efficient *cause* of the price being lowered. If demand were to expand with every enlargement of supply, *the ratio would not be altered,* and the additional quantity produced would be instantly absorbed at the former price; but demand *is* limited, and it is the action of an *increasing* supply upon an *unyielding* or *less yielding* demand, which, on Adam Smith's principles, specifically *causes* the reduction of price.

The effect produced by a higher or lower price, if sustained, in contracting or enlarging the consumption, and diminishing or increasing the sale of commodities, is an important index for the guidance of the producer in adjusting the supply of his goods to the wants of consumers; but it is nothing more than an index. Demand is limited; and if the supply of commodities be recklessly increased, profits and prices must give way, whether the producer trades on his own or on borrowed capital. To continue our former illustration, if we suppose the number of hats which can be disposed of in one year, with the common and average profits, to be 1100; and that the manufacturer, instead of confining himself to this number, produces double the quantity, 2200, or as much as can be disposed of in two years,—then, as a *biennial* return of 10 per cent. on L.2000 is no greater than an *annual* return of 10 per cent. on L.1000, or rather is not so great,—the producer, when he finds that the market is overstocked, will content himself with a lower profit, in order to reduce the stock of goods which he has on hand. The hat-maker will sell 1100 hats for, perhaps, L.1050 instead of L.1100, in order that he may rid himself of a part of the surplus stock, which must otherwise lie dormant and unproductive. But as a commodity (of equal goodness) cannot have two prices in the same market at the same time, what one manufacturer does, every other manufacturer must do, or his stock will remain unsold; and the loss by the delay of his return may be as great as by a partial reduction of the price. Quantity, therefore, is always the ultimate regulator of value.

When the cost of producing a commodity is increased, a *longer period* is required for the disposal of a given quantity of that commodity.

Were the cost of producing hats (to return once more to the example already given) raised to L.2 each, and the manufacturer to make the same number as before, or 1100, it may be said that there is here no alteration of quantity; for 1100 hats were produced before, and 1100 are still produced; all the difference, it may be thought, lies in this, that the manufacturer now stands out for a higher price, and will not part with his hats for less than L.2 a-piece.

But a little reflection will convince us that this elevation of the price has indeed caused a limitation of the quantity, for although the same number of hats be *produced*, it is certain that the same number cannot be *sold* at the *advanced price*, in the *same time*. Probably the hat-maker cannot sell his 1100 hats, at this advanced price, in a shorter period than *two* years; and if so, it is sufficiently evident that the quantity of the commodity has *virtually* been diminished by one-half, just as the cost of production has been enhanced by one-half; and production will thenceforth be limited to this diminished quantity.

By demanding double the former price, and refusing to sell the commodity cheaper, the manufacturer takes the most effectual, and indeed the only means of proportioning the supply to the demand.

Again, take the converse case, and suppose the cost of production, including profits, to be *reduced* to 10s. for each hat, and that no more than the former number of 1100 are brought to market. The alteration of price here causes an augmentation of quantity; for although the *same* number be produced, that number can probably be sold at the reduced price in six months. It is quite evident, therefore, that the quantity of the commodity is, by the accelerated sale, *virtually* increased by one-half, at the same time that the cost of production has been diminished by one-half, and after this change production will be extended to the enlarged demand. Here the manufacturer, by limiting his price to one-half of what he formerly charged, and freely parting with his commodity at the reduced price, adopts the same effectual method of proportioning the supply to the demand.

CHAPTER XI.

Causes and consequences of a general glut described—stagnation of trade—mercantile revulsion—revival of trade, its causes and consequences.

It must never be forgotten that while there are limits to the *vent* or demand for commodities, there are scarcely any limits to the productive powers of human skill and industry, aided by capital and machinery, in the various departments of manufactures.

Were the quantity of *all* commodities increased simultaneously, and in just proportion, their relative values, each to each, might be maintained. But labour and the products of agriculture cannot be increased in the same ratio or with the same facility as the products of manufacturing industry. Hence, as regards the latter products, the tendency of the market is always to become overstocked. Merchants and dealers in every department struggle to keep the market-price on a par with the natural price; and while they continue to do so their sales are necessarily limited. Manufacturers for a while continue their usual rate of production. Sales get heavy, and commodities continue to accumulate, till the growing symptoms of a glut or stagnation of trade begin to appear. The usual expedients of "half time," and a reduction of wages, are now tried by the manufacturers, but without producing any sensible effect upon prices, for generally, under such circumstances, years would be required to clear the market of the existing stock *through the natural vent;* that is, by sales at the natural or "remunerating" price. Those who have been trading on borrowed capital, whether merchants or manufacturers, are in the mean time called upon to fulfil their engagements, and there is a growing necessity for available funds to meet the demands of creditors, who become every day more urgent. Under this pressure prices give way; those who stand out for the natural price can effect no sales—trade almost stands still, and the ominous mutterings of a commercial storm begin to be heard—failures become rife, house after house is struck down, and at length there is a general crash—" bankrupt stocks" are sold off at " half price," or at *any price*, without reference either to cost or profits, and this scene of ruin continues till the mercantile hurricane has fairly cleared the market of the mass of accumulated commodities. Mills, ships, workshops, forges, now get slowly into operation again—demand returns, natural prices are restored—and trade, once more revived, goes on briskly and healthily as before.

The reverse of all this takes place when the market is understocked; trade goes on with energy—demand becomes more intense—manufacturers have orders for more work than they can overtake within the time allowed them—their machinery is in motion night and day—producers and dealers now raise their prices somewhat above the natural price—for so brisk is the demand that the vent for their commodities will bear contraction—and this cheering work goes on till individuals, tempted by the higher profits, transfer additional capital to those thriving employments, and bring the market price again to a par with the natural price.

CHAPTER XII.

Corn, or the food of the people, a commodity sui generis—*Laws by which its value is regulated.*

CORN (by which, both here and elsewhere, we must be understood to mean whatever in any country constitutes the ordinary *food of the great body of the people*) must be regarded as a commodity *sui generis.* Its price is governed partly by the same laws which regulate the price of other commodities, and partly by laws of its own, which demand a separate consideration.

1. Taking periods long enough to allow of the full action and development of the great principle (to be afterwards noticed) which regulates the increase and decrease of population, corn has this remarkable peculiarity, that it creates a market for itself; *i. e.* the supply

of corn, like the supply of other commodities, accommodates itself to the demand, or *if it do not*, the demand, unlike what takes place with reference to any other commodity, accommodates itself to the supply—*both* are flexible. No *continued* overstocking of the market with corn can *permanently* lower its value, for the demand expands with the expansion of the supply. No *continued* understocking of the market can *permanently* elevate its value, for with the contraction of supply there is a corresponding contraction of demand. Hence no transference of capital to agriculture, or, if food be imported from abroad, to that department of foreign trade which furnishes the supply of food, can depress, and no withdrawal of capital from agriculture can elevate, otherwise than temporarily, the rate of profits in that department,—the rate of profits in agriculture being not only self-regulated, but *regulating* average profits in other departments of production. All this we shall endeavour to demonstrate in the Third Book, when we come to analyze the component parts of natural price.

2. Within shorter periods than are required

for these effects upon population, and during which demand may be considered, in mathematical language, *a given quantity*, or at least as less flexible than supply, the price of corn, like the price of every thing else, depends upon the proportion between the supply and the demand—its value is regulated by its relative quantity. An abundant harvest is followed by low prices, and a scanty crop by high prices.

3. *Within the year*, the price of corn is made to regulate the quantity sold and consumed. This is well described by Adam Smith in the following passage from "The Wealth of Nations" —the only one in that great work which distinctly recognises the principle we have endeavoured to elucidate in the last three chapters: —"The interest of the inland dealer," says Dr Smith, "and that of the great body of the people, how opposite soever they may at first sight appear, are, even in years of the greatest scarcity, exactly the same. It is his interest to raise the price of his corn as high as the real scarcity of the season requires, and it can never be his interest to raise it higher. *By raising the price*

he discourages the consumption, and puts every body more or less, but particularly the inferior ranks of people, upon thrift and good management. If, by raising it too high, he discourages the consumption so much that the supply of the season is likely to go beyond the consumption of the season, and to last for some time after the next crop begins to come in, he runs the hazard not only of losing a considerable part of his corn by natural causes, but of being obliged to sell what remains of it for much less than what he might have had for it several months before. If, by not raising the price high enough, he discourages the consumption so little that the supply of the season is likely to fall short of the consumption of the season, he not only loses a part of the profit which he might otherwise have made, but he exposes the people to suffer before the end of the season, instead of the hardships of a dearth, the dreadful horrors of a famine. It is the interest of the people that their daily, weekly, and monthly consumption should be proportioned as exactly as possible to the supply of the season. The interest of the inland corn-dealer is the same. By supplying them, as nearly as he can judge, in this proportion, he is likely to sell all his corn for the highest price, and with the greatest profit; and his knowledge of the state of the crop, and of his daily, weekly, and monthly sales, enables him to judge with more or less accuracy how far they really are supplied in this manner. Without intending the interest of the people, he is necessarily led, by a regard to his own interest, to treat them, even in years of scarcity, pretty much in the same manner as the prudent master of a vessel is sometimes obliged to treat his crew. When he foresees that provisions are likely to run short, he puts them upon short allowance."*

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* I cannot forbear to add Mr Buchanan's admirable note upon this striking passage:—"Those who still imagine that corn is artificially raised in price, would do well to consider, that as the supply of provisions is liable to great variations, there must be some provision in the economy of nature for making a smaller supply last as long as a larger supply; that there is *no way of thus regulating the consumption but by the price*, and that it is accordingly in reference to this great object that the price is invariably fixed. It neither can be lowered nor increased, but for the sake of more exactly suiting the daily and weekly waste to the supply of the

year. If we suppose, for example, that the supply falls in one year one-twelfth below the level of an average crop (which we know frequently happens), it would, if consumption were to go on at the ordinary rate, be consumed in the course of eleven months, leaving the last month wholly unprovided for. But this we know never happens, and it is only prevented by a rise of price, which measures the consumption by the deficiency of the crop; and whether, therefore, there is an abundant, middling, or scarce crop, a suitable allowance is sure to be measured out to the consumer, by a low, a middling, or a high price. The corn-dealer, indeed, thinks nothing about all this; his object is to sell his commodity at the highest price; and in a scarcity he takes his full advantage; but while he is thinking only of himself—while he is only playing his own paltry game, he is a mere instrument in the hands of Him who brings good out of evil, and who turns the little passions of man to the purposes of his own benevolence and wisdom. There is really nothing in nature more wonderful than that great law of society by which subsistence is measured out in due proportion to the supply of the year; and the more deeply it is considered, the more worthy will it appear of profound and rational admiration."—*Smith's Wealth of Nations, with Notes and an additional Vol. by David Buchanan*, 2d edition, vol. ii. p. 304.

BOOK II.

OF LABOUR.

BOOK II.

OF LABOUR.

CHAPTER I.

The value of labour is governed by the same laws which regulate the value of other subjects of exchange.

CHAP. I.

ALTHOUGH all exchangeable commodities are, directly or indirectly, immediately or mediately, the produce of labour, yet trade regards labour itself simply as a subject of traffic and exchange, a thing to be sold and bought in the market,—*a commodity*,*—one, indeed, of primary importance, compared with which all others dwindle into insignificance; but still a commodity which

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* Lawyers make a distinction between *corporeal* and *incorporeal* hereditaments—between *lands* or *money*, for example, and an *office* or *franchise*. This distinction is quite

as applicable to subjects of *value* as to subjects of *right*; for if wealth is power, *power* of certain kinds is also wealth. Labour is the exertion of power. It is *incorporeal*, but it is capable of being measured. It may be sold for money, or exchanged for commodities, which are corporeal equivalents, or for labour, or the exertion of the same species of power in other departments of industry, which is an incorporeal equivalent. If it be objected that this is a *degrading* view of the subject, I can only answer, that for the purposes of science it is of no importance whatever whether it be degrading or elevating; the only question is, whether it be *true*. But in truth this is *not* a degrading view of human labour and exertion, whether mental or physical; for no rational creature can justly feel degraded from the consideration, that, how humble soever may have been the circumstances of his birth, the same beneficent Being who sent him into the world with a sound mind in a sound body, endowed him also with a portion of *wealth*, and of a kind which cannot be depreciated,—natural wealth, original and indestructible, of which all other earthly goods are nothing else than compounds or results.

This view of the subject, too, happily puts an end to the controversy about *productive and unproductive labour*,—a dispute rather about *words* than *things*. To *make* a musical instrument is productive, to *play upon it*, unproductive labour. The man who builds a church is a productive, the clergyman who *uses* that church for the celebration of divine service an unproductive labourer. The physician who *heals* labours unproductively; the butcher who *kills* labours productively.

varies in quantity and fluctuates in price, and the value of which, consequently, is governed by the very same laws which regulate the value of those commodities which are the products of labour. A day's or a year's labour has its price, just as an ounce of silver or a bushel of corn has its price; and that price, in the one case as in the other, depends on the proportion between the supply and the demand.

In fertile and newly peopled countries, *corn* is *cheap*, and *labour*, on the other hand, so *dear* that menials will scarce bear to be called servants. Why is this? Plainly because in such countries *grain* is *abundant* and men are *scarce*, in proportion to the demand.

In *old countries*, on the other hand, countries which have more nearly reached the limits of cultivation, *corn* is *dear*, while *labour* is so *cheap* that mechanics run about the streets begging for employment, and servants submit without

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These are specimens. Now all such unmeaning distinctions are swept away, and this unprofitable controversy settled at once, by regarding labour simply as *a thing which is bought, sold, and exchanged*;—a thing *which has value*, whether brought to market *per se*, or realized and worked up in another commodity.

repining to the hardest work. Again, why is this? Plainly for the directly opposite reason that, in countries so situated, *grain* is *scarce* and *labourers* are *abundant*, compared with the demand.

CHAPTER II.

Labour, though a primary ingredient of cost, is not the foundation of the exchangeable value of commodities, and is not better fitted to be a measure of value than other subjects of exchange. Remarks on Mr Ricardo's theory of value.

Adam Smith has fallen into a great error in adopting *labour* as the sole *measure* of value; and Mr Ricardo, who has ably pointed out this error, has himself committed one as great, or greater, in representing labour as "the *foundation* of the exchangeable value of all things, excepting those which cannot be increased by human industry."

Were there any commodity, or class of commodities, the cost of producing which could be resolved exclusively into human labour or its price, *and did not include profits*, Mr Ricardo's theory would hold good with reference to such commodities; but with regard even to these, it will hold good only so long as a sustained price is made the instrument of regulating supply. The moment the market is allowed to become overstocked with such commodities, quantity (as we have seen) becomes the sole arbiter of price, demand and supply operate freely and without control, and labour is as little regarded as any other ingredient of cost.

Labour, it cannot be too often repeated, is nothing but a subject of sale and merchandise—*a commodity* liable to variations of quantity, and consequent fluctuations of price. And as it is not a measure, so neither is it a constituent of value, in *any other sense* than that in which *any* commodity subject to similar variations and fluctuations, and entering into price as an ingredient of cost, may be said to be a measure or constituent of value.

Labour, no doubt, is one primary ingredient in the cost of producing every commodity, for nothing can be brought to market without labour; and the quantity of every commodity into which this ingredient enters must be so regulated that the *supply of such commodity* shall bear a *less proportion* to the demand for *it* than the *supply of labour* bears to the demand *for labour*. The *difference* between the price or value of the commodity, and the price or value of the labour worked up in it (if the sole ingredient of cost), constitutes the distinct element of PROFITS.

It is the difficulty, or rather the impossibility, of accounting for this *surplus* on Mr Ricardo's principles, which upsets the theory upon which his whole system of political economy is founded; and the numerous exceptions* and modifications with which this theory is guarded would render it of little practical value, even if true; for it must be plain to every one, on the most cursory perusal of Mr Ricardo's work, that his *exceptions* comprehend a far greater number of commodities, and these of infinitely greater magnitude and importance, than those embraced by his *rule*.

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* See Note (A) at the end of the volume.

CHAPTER III.

The value of a commodity which is the immediate product of human labour may be greater or less than the value of the labour of which it is the product.

BOOK II.

SUPPOSE that when the average *price* (*or* WAGES) of a day's labour amounts to 2s. 6d., a labourer, instead of *selling* his day's labour, *i. e.* instead of exchanging that amount of labour for money, goes out to the highway, or the nearest common, cuts a few twigs, and devotes his day's work to the conversion of these twigs into a *basket.*

This basket, according as there happens to be a greater or less supply of baskets in the market, he may sell for 2s., 1s. 6d., or any *less* sum than 2s. 6d.; or he may sell it for 3s., 5s., or a *greater* sum than 2s. 6d. The *value of the basket* is determined by the proportion which the *supply of* *baskets* bears to the *demand for baskets.* The *value of the labour* is determined by the proportion which the *supply of labour* bears to the *demand for labour.* Several observations here suggest themselves.

1*st*, That the price of this commodity (the basket), if sold for *more* than 2s. 6d., is not the higher wages of more skilful labour, appears from hence, that *whatever* may be the amount of skill required for the formation of the basket, the value of the basket will be less or greater according as the supply of baskets is greater or less compared with the demand. If the supply of baskets be increased, then, however skilful, arduous, or difficult the labour may be, the *result* of the day's labour (*i. e.* the basket, the commodity in which that labour is realized) may be sold for 1s. 6d., while the *labour itself*, if *not* worked up and realized in this commodity, would have fetched 2s. 6d. If the supply of baskets, on the contrary, be diminished, the result of the day's labour, how little skill or difficulty soever it may imply, may sell for 3s., 4s., or a greater sum.

2*d*, In order to be convinced that the labour realized in the basket is not the *foundation* of the value of the basket (although the one be the direct and immediate product of the other), it is only necessary to consider that the *primary* commodity (a day's labour) would have fetched 2s. 6d., while the basket, as we have just seen, may be sold for less than that sum. A commodity which in the market is worth *half-a-crown*, cannot, in any intelligible sense, be said to be *the foundation* of the exchangeable value of *another* commodity which in the market is worth only *eighteen pence*.

3*d*, But if the basket can be sold for 3s., 4s., or 5s., *more labour* will be immediately devoted to the manufacture of baskets, and the increased supply will reduce the price to 2s. 6d. True, but then *it is the increased supply* of the commodity which reduces the value of the basket to a par with the value of a day's labour,—it is *not* the amount of labour "realized in the commodity" which regulates its price, for the labour is the same, and its worth, estimated in money, or in any *other* commodity, is the same, whether the basket, the product of that labour, be sold for a shilling or a crown.

4th, The price (*wages*) of a day's labour may, according as the supply of labour happens to be less or greater in proportion to the demand, rise higher or sink lower than 2s. 6d.; but *this circumstance* will not affect the price of the basket (the product of a day's labour) *unless* the supply of baskets be enlarged or contracted.

5th, It must be granted that the labour employed is *a measure* of the value of the basket; for if the basket be sold for 5s., it is worth *two* days' labour, though the produce of *one;* if it be sold for 1s. 3d., it is worth only *half* a day's labour, though the produce of a whole one.

But this capacity for *measuring* value does not distinguish labour from other subjects of exchange. The basket is as much a measure of the value of the day's labour of which it is the product, as the day's labour is of the value of the basket. If the basket be sold for 5s., the value of the day's labour is only *one-half* that of the product; if the product be sold for 1s. 3d., the value of the day's labour is *double* that of the product. Each commodity may be made a measure of the value of the other, because no commodity can rise or fall in value in relation *to itself.*

6*th*, When a commodity is of greater value in the market than the labour which produced it, the *difference* between these values constitutes the element of PROFITS. But the value of the *resulting commodity* is as much a *real*, *substantive*, *independent* value, as that of the *labour* which produced it,—it is *created* in the same manner, and is *maintained*, *increased*, or *diminished* by the *selfsame law* of demand and supply. That the value of commodities which are the immediate products of labour does not generally exceed the value of the labour employed on their production *by more* than the common and ordinary rate of profits, is obviously caused by the producer so adjusting the supply of his commodity to the demand as to effect this result.* The laws which regulate the natural rates of wages and profits will be afterwards fully considered.

7*th*, Labour may be called a primary ingredient of cost, because all commodities are mediately or immediately the products of labour. Labour, in other words, is the commodity by the agency and employment of which, directly or remotely, all other commodities are produced,—*it comes first in order*, just as the production of the raw material of any manufacture comes before the production of the completed commodity; but its *priority* does not make labour the *foundation* of the exchangeable value of the products of labour, any more than the priority of raw cotton makes it the foundation of the exchangeable value of cotton cloth. The rising or falling value of the primary commodity is not the *efficient cause* of a corresponding elevation or depression of the value of another commodity produced from it,—it is merely an *index*, though a most important and indispensable index, to guide the producer in the application and management of the power by which the effect is really produced, namely, the adjustment of supply to demand.

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* See Note (B) at the end of the volume.

8*th*, Another observation is, that there is *no commodity* "the price of which is altogether the wages of labour" except *labour itself.* Adam Smith states that "in some parts of Scotland a few poor people make a trade of gathering

BOOK II.

along the seashore those little variegated stones called Scotch pebbles. The price which is paid to them by the stone-cutter," he adds, "is altogether the wages of their labour, neither rent nor profit make any part of it." *

Now, whether the pebbles gathered in a day, a week, or a month, would fetch a higher or lower price than a day, a week, or a month's labour, or would fetch exactly the same price, would depend altogether on the state of demand and supply.

The value of the pebbles is determined by the proportion which the supply of pebbles bears to the demand for pebbles; while the value of the day, week, or month's labour employed in gathering them is determined by the proportion between the supply of labour and the demand for labour. If the pebbles are sold for a greater price than the labour *per se* will fetch, the *excess* is *profit*, but the *whole price* of the pebbles, profits included, is as truly a *separate value*, an *independent worth*, as the price of the labour.

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* Wealth of Nations, book i. chap. vi.

9*th*, The last observation which I shall make on this subject is, that there is no ground to conclude that "there can be no rise in the value of labour without a fall of profits,"* and "that the rate of profits can never be increased but by a fall in wages."† To recur to our former illustration, the value of a day's labour realized in the manufacture of a basket was 2s. 6d.; if ordinary or average profits were at 10 per cent., the supply of baskets might be so proportioned to the demand that each should sell for 2s. 9d.; if the value of a day's labour rose to 3s. 4d., the supply might again be so adjusted that each basket should sell for 3s. 8d.; the value of labour, therefore, might rise without a diminution of the rate of profits. Again, profits might rise to 20 per cent., a day's labour being still equal to 2s. 6d., and the supply might be so proportioned that each basket should sell for 3s. In this case profits would rise, and wages would not fall. Lastly, the value of a day's labour might rise to 3s. 4d.,

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* Ricardo on Political Economy and Taxation, 3d edition, p. 31.

† Ibid., p. 137.

BOOK II. and profits to 20 per cent., and the supply, once more, might be so adjusted as that each basket should sell for 4s., in which last case wages and profits would rise simultaneously.

CHAPTER IV.

Of the relative value of labour, corn, and gold.

CHAP. IV.

It has been already shown that the value of a determinate portion of an exchangeable commodity A, estimated in another exchangeable commodity B, is less or greater according as the total supply of A is greater or less in proportion to the total supply of B. The value of labour, like that of every other subject of sale and exchange, is governed by this law.

To illustrate this, let us suppose the relative quantities of the three commodities, *labour*, *corn*, and *gold* in any country to be such that *eight ounces* of pure *gold* will freely exchange in the market for *one year's work* of a common agricultural labourer, or for *eight quarters of wheat*; in such circumstances, one year's labour, eight quarters of wheat, and eight ounces of gold, are of equal value.

Let the number of labourers now be temporarily* increased, the quantities of wheat and gold remaining unchanged, and one year's labour shall exchange for perhaps only seven quarters of wheat or seven ounces of gold.

No change having taken place in the relative quantities of wheat and gold, wheat will still fetch the same money price. The value of labour, estimated in gold or in wheat, has fallen; gold and wheat, estimated in labour, have risen; but gold, estimated in wheat, and wheat, estimated in gold, maintain their former value each to each.

Again, increase the supply of wheat, the supply of labour and gold remaining as before, and similar effects, *mutatis mutandis*, will be produced. Wheat, estimated in gold or in labour, shall fall in value; but the value of labour, estimated in gold, and of gold, estimated in labour, shall undergo no change.

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* Nothing, as will be afterwards shown (chap. ix.), can *permanently* alter the ratio of population to food, but a change in the labourers' standard of enjoyment and habits of living.

Once more, increase the supply of gold—corn and labour remaining as before—the money price of both corn and labour will rise. One year's labour and eight quarters of wheat will now probably exchange for nine ounces of gold. Eight ounces of gold will not now command the same amount of labour or the same quantity of wheat as before—the value of gold has fallen in relation to corn and labour. But the value of labour, estimated in wheat, and of wheat, estimated in labour, has suffered neither depression nor elevation—the money price of each has risen, but risen in equal proportion.

CHAPTER V.

A high or low money price of corn is not the cause *of a high or low money price of labour, nor,* vice versa, *is a high or low money price of labour the* cause *of a high or low money price of corn: the contemporaneous elevation or depression of the money value of corn and labour is the* effect *of a cause which is* common to both, *namely, the combined and simultaneous decrease or increase of the supply of corn and labour.*

BOOK II. SUPPOSE the two commodities, corn and labour, to have this *peculiarity*, that the supply of corn cannot be increased or diminished (and continue so for a certain number of years) *without being followed by a corresponding enlargement or abridgment of the supply of labour*, or, which is the same thing, by a corresponding increase or diminution of the numbers of the labouring population, it would follow, from the principles already explained, that the money price of corn and labour *would rise and fall together*, or tend constantly to the same level. This might be demonstrated as strictly as the mathematical proposition that "*equal magnitudes have the same ratio to the same magnitude, and the same has the same ratio to equal magnitudes.*"

Increase the supply of corn, its money price will be depressed, and continue so till mankind (in Paley's language) *breed up* to the enlarged means of subsistence; but the moment that this consequence *actually results*, the money price of labour will also fall, and fall proportionally as low as the money price of corn had previously sunk. When the former ratio of population to food has thus been restored, the labourer will have the same command over the necessaries of life as he had before, and, notwithstanding the fall of money prices, his condition, as respects his supply of food, will be neither better nor worse than it formerly was.

Again, let the supply of corn be diminished, its money price will rise; but as this abridgment of the supply of corn, if continued, will eventually cause a corresponding reduction in the supply of labour, the money price of labour will continue to rise till corn and labour regain their former proportion to each other, and till the money price of the one is again on a par with the money price of the other.

In short, if an enlargement or abridgment of the supply of corn be invariably followed, after a certain interval, by a corresponding increase or diminution of the supply of labour, no temporary alteration of the *ratio* which usually obtains between these two commodities, and, of consequence, no elevation or depression of the money price of either, can take place without calling into action a principle which will eventually correct the deviation, by equalizing the supply, and restoring the former proportion between the money price of the one and the money price of the other.

CHAPTER VI.

The population of every country has a constant tendency to exceed the limits of its food—this tendency checked by the limited supply of food—an enlargement of that supply does not cause, it merely permits, *the increase of population.*

Corn and labour actually *are* supplied under the peculiar conditions stated in the last chapter.

Nature has provided for the indefinite increase of plants and animals; but the prolific tendency of plants is checked by the limited extent of the fertile land of every country, and the fecundity of animals is repressed by the growing difficulty of obtaining supplies of food.

The numbers of the human race, if permitted, would go on *doubling* every twenty-five years, or even in shorter periods. It is an historical fact, that population has increased at this rate in

North America for nearly a century and a half; and were this rate of increase continued, it is obvious that, in not very many centuries, North America alone could furnish inhabitants sufficient to people not only the whole of our globe, but other worlds besides. Population increases in a geometrical ratio.

Let us next consider at what rate the food which is requisite to maintain this population is produced.

The extent of fertile land in every country is limited, but it may be much increased by industry, capital, and agricultural skill. Suppose that by these means the produce of this or any other country could be *doubled* at the end of the first twenty-five years, it could scarcely be *quadrupled* at the end of the next twenty-five years; at all events, let the skill and industry of cultivators be what they might, it could not *go on* doubling; for, if it did, at the end of only *two* centuries, the agricultural produce of Great Britain must amount to *two hundred and fifty-six times* what it now is, a rate of increase not only exceeding probability, but obviously much greater than what the nature of things renders possible.

Under the most favourable circumstances, food cannot be made to increase faster than in an arithmetical ratio.*

What is the inference, then, to be deduced from these facts? Clearly this, that population constantly tries to go beyond the means of subsistence, and is as constantly checked, repressed, and kept down to the level of these means.†

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* See Malthus' Essay on the Principle of Population, book i. ch. i., 6th edition.

† "In every country some of these checks are, with more or less force, in constant operation; yet, notwithstanding their general prevalence, there are few states in which there is not a constant effort in the population to increase beyond the means of subsistence. This constant effort as constantly tends to subject the lower classes of society to distress, and to prevent any great permanent melioration of their condition. These effects, in the present state of society, seem to be produced in the following manner:—We will suppose the means of subsistence in any country just equal to the easy support of its inhabitants. The constant effort towards population, which is found to act even in the most vicious societies, increases the number of people before the means of subsistence are increased. The food, therefore, which before supported eleven millions must now be divided among eleven millions and a half. The poor consequently must live much worse, and many of them be reduced to severe distress. The number of labourers also being above the proportion of work in the market, the price of labour must tend to fall, while the

Double the food, as in America, every twenty-five years, and population will double itself in the same time; double the food, as in some of the countries of Europe, every eighty, ninety, or one hundred years, and mankind will multiply only at that diminished rate. "The generative faculty," says Sir James Steuart, "resembles a spring loaded with a weight, which always exerts itself in proportion to the diminution of resistance: When food has remained some time

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price of provisions would at the same time tend to rise. The labourer, therefore, must do more work to earn the same as he did before. During this season of distress, the discouragements to marriage and the difficulty of rearing a family are so great, that the progress of population is retarded. In the mean time, the cheapness of labour, the plenty of labourers, and the necessity of an increased industry among them, encourage cultivators to employ more labour upon their land, to turn up fresh soil, and to manure and improve more completely what is already in tillage, till ultimately the means of subsistence may become in the same proportion to the population as at the period from which we set out. The situation of the labourer being then again tolerably comfortable, the restraints to population are in some degree loosened; and, after a short period, the same retrograde and progressive movements with respect to happiness are repeated."—Malthus' *Essay on the Principle of Population*, book i. ch. ii., 6th edition.

without augmentation or diminution, generation will carry numbers as high as possible; if then food come to be diminished, the spring is overpowered, the force of it becomes less than nothing, inhabitants will diminish, at least in proportion to the overcharge. If, upon the other hand, food be increased, the spring will begin to exert itself in proportion as the resistance diminishes; people will begin to be better fed; they will multiply, and, in proportion as they increase in numbers, the food will become scarce again." *

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* Inquiry into the Principles of Political Economy, book i. ch. iii.

CHAPTER VII.

A temporary enlargement or abridgment of the supply of corn instantly affects its money price, but does not sensibly affect the money price of labour—the value of corn is raised or depressed by the operation of two laws, which are quite distinct, but which act in harmony.

BOOK II.

ONE good or bad harvest may, and probably does, produce a certain effect on the numbers of the population; but the effect is not so great as sensibly to influence wages or the price of labour,—a longer time is required for the development of this effect. But a single good or bad harvest instantly and very perceptibly affects the price of corn.

Whatever alters the proportion between the supply and demand operates at once upon price. There are two laws by the combined operation of which (as already partially explained) the price of corn is regulated,—one the great law of demand and supply which regulates its average price during periods within which demand is unyielding, or less yielding than supply,—the other that law in virtue of which corn, by influencing the supply of labour, creates a market for itself, and keeps wages, or the money price of labour, in a certain proportion to its own money price.*

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* M. Say, in an isolated passage, takes notice of this principle, but he seems not to have been aware of its vast importance, for he does not recur to it in any other part of his work. "There is this *peculiarity* attending the products of agricultural industry; viz. that their average price is not raised by *growing* scarcity, *because population is sure to decline co-extensively with the declining supply of human aliment; so that the demand necessarily diminishes equally with the supply.* Thus, it is not found that wheat is dearer in those countries where great part of the land is thrown out of tillage, than where it is all in a high state of cultivation. In Spain, wheat is not now dearer than in the time of Ferdinand and Isabella, though it is there produced in much less abundance; *for the number of mouths to be fed is also much less.* On the contrary, the lands of both England and France were less cultivated in the middle ages than at the present day, and their product of grain less abundant; yet it does not appear from a comparison of other values, that it was then much dearer than

The joint and simultaneous action of these two economical laws gives rise to no clashing or discord,—the one is not at variance with the other, any more than the diurnal revolution of

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at present. *The product and the population were* BOTH *greatly inferior; and the slackness of demand counterbalanced the slackness of supply."—Say's Political Economy*, book iii. chap. viii., *note.*

The best or rather the only test of the soundness of a *theory* is its accordance with ascertained *facts.* The view taken by M. Say in the note to his work just quoted receives singular confirmation from the following account given by Arthur Young of the actual prices of wheat in England during the 17th and 18th centuries.

" From 1595 we have fortunately a regular register of wheat at Windsor; but as the measure there is nine gallons, and the price minuted that of the best wheat in the market, the sums are reduced two-ninths to bring them to the Winchester measure and average quality, until the year 1771, when Catherwood's tables for the average of the whole kingdom by the authority of the Register Act commenced; the price of this long period I have reduced to the following average.

" That of the 17th century was £1 : 18 : 2
18th century — £1 : 18 : 7
being a rise of only ½d. per bushel.

" THE EQUALITY BETWEEN THESE TWO CENTURIES IS ONE OF THE MOST REMARKABLE CIRCUMSTANCES TO BE MET WITH IN THE ECONOMICAL HISTORY OF THIS COUNTRY."—*Progressive Value of Money*, p. 75 (*cited by Mr Tooke, History of Prices*, vol. i. p. 83).

the earth round its axis, which produces day and night, is at variance with the annual revolution of the earth round the sun, to which we are indebted for the vicissitudes of the seasons,—the two operate in complete harmony. Increase the supply of corn, its money price instantly falls,—the labourer obtains a greater command over the means of subsistence, and, if this increase be permanent, an additional population is raised up to consume the additional supply.

It would be wrong to regard this as a mere random calculation, or the result as brought out by the partial selection of a particular period. Let any one take up Mr M'Culloch's valuable edition of Smith's *Wealth of Nations*, where he will find authentic tables of prices down to 1826, and, reducing the whole to a uniform measure, note the average price *first* of the century from 1626, when the discovery of the American mines had produced its full effect on money prices, to 1725 inclusive, omitting four years, the accounts for which have been lost, and *then* the average of the century from 1726 to 1825 inclusive, omitting the twenty-three years of the bank restriction—a period during which it is allowed on all hands that we had no correct measure of property—and I think he will find that the average price of wheat for the last of these centuries does not exceed the average of the century which preceded it by more than *a penny farthing* per quarter,—at all events, the difference amounts to a mere trifle.

Again, diminish the supply of corn, its money price instantly rises, the labourer's command over the means of subsistence is diminished, and, if this abridgment of the supply be continued, population is checked (the usual number of people continue to *go out* of the world, while a smaller number *come in*), and is ultimately reduced to a level with the food.

CHAPTER VIII.

The value of labour is also raised or depressed by the operation of two causes which are distinct from each other, and act in harmony. Natural and market price of corn and labour.

Besides the operation of the principle by which population is kept permanently on a level with the means of subsistence, and the price of labour consequently on a level with the price of corn, another law is constantly in action, which (within shorter periods) causes the price of labour to rise or fall as the demand for labour happens to exceed or fall short of the supply.

We have already seen that there is a *limit* to the demand for the products of labour, and that *but* for such a limit prices would not be influenced by the transfer of capital from one employment to another. Every rise or fall of

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price is referable to an alteration of the ratio between supply and demand, as its proper cause; and if supply and demand expanded and contracted proportionately and together, there would be no alteration of the ratio, or consequent rise or fall of price.

A temporary stagnation of trade, created by an excess of the supply of commodities, causes necessarily a temporary falling off in the demand for labour. This temporary slackness of the demand for labour, however, does not limit the labourer's control over the means of subsistence *for a period long enough* to cause a reduction in the numbers of the population, *i. e.*, in the supply of labour; but, while it lasts, it influences wages, or the price of labour, and its influence will continue till the market is again cleared of the mass of commodities by which it happens for the time to be glutted.

It thus appears that the average permanent prices of both corn and labour are made to bear a certain ratio the one to the other, by the operation of that law which maintains population, or the supply of labour, on a level with the supply of food; and this average price may be called the natural price of corn and labour; while the temporary deviations of the market price of corn from its natural price are caused mainly by an excess or deficiency of supply, and the temporary deviations of the market price of labour from its natural price, by a contraction or expansion of the demand.

CHAPTER IX.

The ratio of the supply of labour to the supply of corn is regulated by the labourer's general habits and mode of living—an alteration of this ratio will permanently raise or depress the value of labour, whether estimated in corn or money.

BOOK II

THE ratio between the numbers of the people and the supply of food in any country, on which, as we have seen, depends the proportion between the average price of labour and the average price of corn, is not and cannot be fixed arbitrarily, but results naturally from the habits of the working classes and their general mode of living.

The price which the labourer exacts for his work regulates the proportion between labour and food. It would be absurd to assert that any one labourer, or any conceivable number of labourers, can, by a mere exertion of will, fix the price of labour, either generally throughout a country or in any particular province or locality; but it is evident that in every country there is a certain average standard of comfort and enjoyment which custom has rendered essential to the working classes, and it is by the maintenance of this standard,* based, as it always is and must be, upon the moral and physical habits of the entire labouring population, that the ratio, whatever it be, between population and food is fixed and regulated.

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* *By what means* the standard of comfort and enjoyment which obtains among the great body of the people can be most effectually elevated or best maintained, and those provident habits upon which depend the relative supply and value of labour best engendered or secured, is a problem of absorbing interest, because of supreme practical importance,—one compared with which all our other speculations sink into insignificance; but it is a problem of which the science of value can afford no solution. To that science labour presents itself simply as a subject which can be sold or exchanged, and the value of which, in relation to other subjects of exchange, fluctuates with the relative increase or decrease of its quantity. With the *causes* of that increase or decrease our science has no more concern than with the causes of the increase or decrease of corn or broadcloth; and as the one subject is handed over to the agriculturist or the manufacturer, so must the other to the moralist, the politician, or the practical statesman. A theme of such moment and magnitude may well employ the best powers of the human mind, but it is not within the limits assigned to the present work. They who take an interest in such *mixed questions*, would do well to study Mr Malthus'

It is obvious that nothing can disturb this ratio, but a departure from that standard, and a surrender of those habits; for every permanent augmentation of food being followed by a corresponding addition to the population, and every permanent abridgment of the supply of food being followed by a corresponding reduction of numbers, the proportion between the supply of labour and the supply of corn cannot be altered by artificial means. If the labourer's mode of living in any country re-

celebrated *Essay on the Principle of Population, and its Past and Present Effects on Human Happiness*; and also Dr Chalmers' work *On Political Economy in connexion with the Moral State and Moral Prospects of Society.* In the 15th chapter of his work (2d edition), Dr Chalmers has pointed out with great judgment and force the *moral* (which are indeed the only permanently effectual) preventives of the evils of a redundant population; and the treatise at large may be referred to as perhaps the most eloquent and convincing exposition in any language of the intimate connexion which subsists between a sound moral and a sound physical and economical state of the community.

quire a larger average share of the necessaries and conveniences of life to induce him to marry and continue his race*—in a country so situated, the supply of labour will be less in proportion to the *quantity*, and its value greater in proportion to the *price* of corn, than in a country where the standard of living is lower, and the number of labourers consequently greater in proportion to the supply of corn.

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* "The kind and quality of food and liquor, the species of habitation, furniture, and clothing, to which the common people of each country are habituated, must be attainable with ease and certainty before marriages will be sufficiently early and general to carry the progress of population to its just extent. It is in vain to allege that a more simple diet, ruder habitations, or coarser apparel, would be sufficient for the purposes of life and health, or even of physical ease and pleasure. Men will not marry with this encouragement. For instance, when the common people of a country are accustomed to eat a large proportion of animal food, to drink wine, spirits, or beer, to wear shoes and stockings, to dwell in stone houses, they will not marry to live in clay cottages, upon roots and milk, with no other clothing than skins, or what is necessary to defend the trunk of the body from the effects of cold, although these last may be all that the sustentation of life and health requires, or that even contribute much to animal comfort and enjoyment. The ease, then, and certainty with which the means can be procured, not barely of subsistence, but of that mode of subsisting which custom hath in each country established, form the point upon which the state and progress of population chiefly depend."—*Paley's Moral and Political Philosophy*, book vi. chap. xi.

Suppose that in any country the average corn-wages of a year's labour amount to *eight* quarters of wheat, the number of labourers will be less in such a country than in another having the same supply of food, but where the labourer's habits of living make him content with only *six* quarters of wheat for his year's work.

Suppose the average corn-wages of a year's labour to be reduced from eight to six quarters of wheat, it is evident that the value of labour, whether estimated in gold or in corn, will be permanently diminished; for the supply of labour will, after such a change, bear a greater proportion to the supply of corn, inasmuch as after the reduction there will be a year's labour for every six quarters of wheat annually produced, instead of a year's labour for every eight quarters. The value of corn, estimated in labour, will have permanently risen, for the same quantity of corn will now exchange for more labour than before; the value of gold, estimated in labour, will also have permanently risen, for the same quantity of gold will also exchange for more labour than before; while the value of labour, whether estimated in corn or in gold, will have permanently fallen, with the permanently greater supply induced by the altered habits of the people. The same amount of labour will now exchange for less corn and for less gold than it formerly did.

The law formerly explained, namely, that an increase of food is always followed by an increase of population, and *vice versa*, still operates —labour increases and keeps pace with the increase of food; but the supply of the one bears a permanently altered ratio to the supply of the other.

Did the quantity of gold, or other material of money, not increase (according to a law to be afterwards explained) with the combined increase of population and food, it is evident that, as society advanced, the money-price of both labour and corn would go on continually sinking. We shall see by and by that the supply of the precious metals does in some degree keep pace with the increase of the other two commodities; but whether it does so or not

BOOK II.

makes no difference whatever with respect to the relative value of corn, labour, and all other commodities, as the money price of all must rise or fall simultaneously, and in the same proportion.

CHAPTER X.

The price of labour varies in different departments of industry—These variations may be traced to five causes, but all referable to the principle of supply and demand.

THE price of labour varies in the several departments of industry. Dr Adam Smith[*] has noted *five* circumstances which make up for the smaller gain in some employments, and counterbalance a greater gain in others, viz. :—

1. The agreeableness or disagreeableness of the employments.
2. The greater or less difficulty and expense of learning them.
3. The constancy or inconstancy of employment in them.
4. The responsibility attached to the exercise of them; and,

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[*] Wealth of Nations, book i. chap. x. part i.

5. The probability or improbability of success in them.

Now it can be shown, that all these circumstances influence the price of labour only by influencing its relative supply in the different departments of industry and production. In choosing their employment, men naturally prefer what is most agreeable, easiest learned, most constant and uniform, and attended with the least care and the greatest certainty of success. In employments which combine *all* these recommendations, the supply of labour is greater, and the price consequently lower than in other employments. Fewer people enter into disagreeable employments than into those which are agreeable; fewer still into those which are both disagreeable and require a long and expensive course of training; and still fewer into such as have attached to them *all* the disadvantages above enumerated. The price of labour in each department, therefore, is regulated by the proportion between the supply and demand, though various circumstances unite to influence the supply.

BOOK III.

OF PROFITS.

BOOK III.

OF PROFITS.

CHAPTER I.

Profits of agriculture—Case of a country newly entered upon, thinly peopled, its supplies of food derived from land of uniform fertility, not yet exhausted—no gradation of soils, no rent—money not yet introduced.

CHAP. I.

In order to explain clearly the difficult subject of *profits*, we must begin by attempting to trace the progress of wealth from that rude and primitive state of society which precedes the introduction of money; and we shall suppose a country newly entered upon, thinly peopled, partially cultivated,—its best land alone under tillage,—a part of that land still unappropriated, —and *rent* (which, as we shall afterwards see, arises from the unequal fertility of soils) as yet wholly unknown.

Under such circumstances, the whole produce of the land will belong to the actual cultivator, for he has no landlord to share it with him; and that part of the produce which remains to the cultivator after replacing the capital employed in raising it will constitute his PROFITS.

Suppose the cultivator's capital to consist of 100 quarters of corn. This capital he lays out in sowing his fields, and in maintaining not only the labourers and labouring cattle employed in cultivation, but in feeding other labourers not directly employed in agriculture, but whose business it is to provide clothing, fuel, and shelter, as well for the agricultural labourers as for themselves; and to make and keep in repair such tools and implements as may be required for the purposes of husbandry. Or, if this hypothesis be thought liable to objection as implying a state of society in which the *division of labour*, which seldom precedes the introduction of money, has made some progress; suppose *all* the labourers to be employed in agriculture, each reserving from that employment sufficient time to provide himself with clothing, &c. In short, suppose the cultivator's whole annual outgoings to amount to 100 quarters of corn, and his annual returns to amount to 120 quarters, it follows that *his profits* are exactly 20 quarters of corn, or 20 per cent. on his capital.

All the land as yet under the plough is, by the hypothesis, of equal fertility, and it is not necessary to suppose the cultivator's capital limited to 100 quarters—his capital may amount to 1000 quarters—or instead of one cultivator, there may be 500 cultivators. All that we need to assume is, that for every 100 quarters of corn laid out in the way we have described, there is a uniform return of 120 quarters.

CHAPTER II.

The same hypothesis continued—corn-wages, or the value of a given amount of labour estimated in corn, regulated by the ratio which the supply of labour on the whole bears to the supply of corn on the whole, and not by the ratio which the return from land bears to the cost of production.

WE must here revert for a moment to the argument of Book Second. The value of labour, estimated in corn, depends upon the ratio (fixed by the labourer's general habits of living) between the numbers of the labouring population on the whole and the supply of corn on the whole. And the quantity of corn cannot be permanently increased or diminished without a corresponding enlargement or abridgment of the supply of labour.

While the labourer's standard of comfort and habits of living continue the same, therefore, average corn-wages may be considered a *given quantity*, and not dependent (any more than the quantity of *seed* is dependent) on the ratio between the *return from land* and the *cost of production.** If the average value of a year's labour

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* The assumption (for it is nothing else) that the price of labour depends on the proportion between the return from the least productive land and the *labour employed* on the production of that return, is one of the fundamental errors of Mr Ricardo's system. "The natural price of labour," he says, "depends on the price of the food, necessaries, and conveniences required for the support of the labourer and his family" (*On Political Economy and Taxation*, 3d edition, p. 86), and the price of food on the "labour employed in the production of the last portion obtained;" *ergo*, the price of labour *also* depends on the quantity of labour employed on the least productive land, in proportion to the return. "When wheat was at L.4 per quarter, suppose the labourer's wages to be L.24 per annum, or the value of six quarters of wheat, and suppose half his wages to be expended on wheat, and the other half, or L.12, on other things. He would receive,

L.	s.	d.		L.	s.	d.		
24	14	0	when wheat was at	4	4	8	or the value of	5.83 quarters.
25	10	0		4	10	0		5.66 ...
26	8	0		4	16	0		5.50 ...
27	8	6		5	2	10		5.33 ...

"He would receive these wages to enable him to live just as well, and no better than before," &c. (*ib.* p. 98). In a subsequent part of his work (p. 122), Mr Ricardo carries a calculation on the same hypothetical basis still farther; the of one man, estimated in corn, be 10 quarters of wheat, when the return from 100 quarters is 120 quarters, it may and (unless other causes

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result of which is, that when the price of wheat reaches L.20 a-quarter, the wages of each labourer will amount to L.72 a-year, and the farmer's profits be annihilated.

The money price of corn, according to Mr Ricardo, continues rising at every step in the descent of cultivation, *because* more labour is employed in the "production of the last portion obtained" (p. 63). He even gives a formula for calculating the supposed rise of price (pp. 110, 111):—" If the labour of ten men will, on land of a certain quality, obtain 180 quarters of wheat, and its value be L.4 per quarter, or L.720; and if the labour of ten additional men will, on the same or any other land, produce only 170 quarters in addition, wheat would rise from L.4 to L.4, 4s. 8d.; *for* 170 : 180 : : L.4 : L.4, 4s. 8d. In other words, as for the production of 170 quarters, the labour of ten men is necessary in the one case, and only that of 9.44 in the other, the rise would be as 9.44 to 10, or as L.4 to L.4, 4s. 8d. In the same manner it might be shown, that if the labour of ten additional men would only produce 160 quarters, the price would further rise to L.4, 10s.; if 150, to L.4, 16s.," &c. &c.

The theory of a constantly rising money price of corn is totally irreconcilable with observed phenomena. How much, for instance, have the trade, the wealth, the revenue, and all the resources of England increased since the reign of Elizabeth! What prodigious advances in arts and manufactures! What additions to the population! How great the extension of cultivation! And, on the other hand, how much have the profits of stock *fallen* even since the reign of James the First, when the legal rate of interest was *reduced* interfere to alter it) will be of the very same value though the return be reduced to 110 quarters, or 10 per cent. on the cost. The *total* supply of corn regulates the *total* supply of labour, and the ratio between the whole quantity of the one and the whole quantity of the other regulates corn-wages.

More of the commodity (*labour*) may be required for the production of 120 quarters of wheat as we descend to soils of lower fertility (just as more seed may be required); but the value of this commodity (labour), estimated in corn, will not be thereby enhanced. If the re-

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from 10 to 8 per cent.! And, after all, what was the difference between the average money price of wheat in the 17th and 18th centuries? *Only fivepence a-quarter, or about a halfpenny a-bushel.* Arthur Young gives the average thus:—

" 17th century, . .	L.1 : 18 : 2
" 18th century, . . .	L.1 : 18 : 7"

No theory can get the better of the *fact* stated by M. Say (see *ante*, note to Book II. ch. 7), that the price of corn in England and France has not materially varied, notwithstanding the great extension of cultivation; nor in Spain, notwithstanding the quantity of land in that country which has been thrown out of cultivation. Mr Ricardo does not directly gainsay this statement, but passes it by with asking, " has not M. Say forgotten that it is the cost of production which ultimately regulates price?"

turn from as much labour and seed as are equal to 100 quarters be 110 instead of 120 quarters, PROFITS are reduced from 20 to 10 per cent.; but the number of labourers *on the whole* still bears the same proportion to the supply of corn *on the whole*, and on *that* alone depends the corn-value of labour.

If it be asked, then, in the state of society we have here supposed, of what do the profits of agriculture consist? the answer is obvious: agricultural profits are composed of that part of the whole produce which remains to the cultivator after replacing the capital employed in production. *Wages* are not regulated by the proportion between the capital and return, but are governed by the laws already explained. *Profits* again depend upon the ratio between a given quantity of corn employed in production and the amount of the product obtained from such given quantity.

CHAPTER III.

Same hypothesis—an ordinary or average rate of profits is maintained by the transference of capital from one employment to another.

CHAP. III.

THERE is in every country a general or average rate of profits, maintained by the constant transference of capital from less lucrative to more profitable employments. If profits in one department be at 10 per cent. while in another they are at 20 per cent., capital will be withdrawn from the one employment and transferred to the other, till, by an abridgment of supply and consequent elevation of price in the less profitable, and an enlargement of supply and consequent depression of price in the more profitable employment, the rate of profits in both is equalized.*

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* "When the demand for silks increases and that for cloth diminishes, the clothier does not remove with his capital to the

The higher profits of retail trade resolve themselves into remuneration for the greater personal exertion of the retail dealer; while the higher profits in trades which are hazardous may be resolved into a premium of insurance against the risks which are incurred. And if the rate of profits in trades which, though not more hazardous, are less creditable or agreeable than others, be also somewhat higher than the average, it is not so to a greater extent than is sufficient, in the estimation of the parties, to make up for the disagreeable or discreditable nature of such employments. Adam Smith has demonstrated all this very clearly.* It may therefore be safely laid down as a general principle, that two rates of profit cannot *continue* to coexist in the same country.

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silk trade, but he dismisses some of his workmen, he discontinues his demand for the loan from bankers and monied men: while the case of the silk manufacturer is the reverse; he wishes to employ more workmen, and thus his motive for borrowing is increased; he borrows more, and thus capital is transferred from one employment to another, without the necessity of a manufacturer discontinuing his usual occupation."—*Ricardo on Political Economy*, 3d edition, p. 82.

* Wealth of Nations, book i. ch. x.

While the profits of agriculture continue, as in the instance we have supposed, at 20 per cent., no manufacturer of a commodity, whatever it be, who can afford to lay out 100 quarters of corn in the maintenance of labour, will be content to receive a profit of less than 20 per cent. Suppose a hatmaker, for example, to lay out a capital equivalent to 100 quarters of wheat in the production of hats, and that with this capital he can produce and bring to market, in one year, 240 hats, he will not, it is very evident, consent to exchange these 240 hats for less than 120 quarters of wheat. Why should he give them in exchange for less than 120 quarters, when, by employing his capital of 100 quarters in agriculture, instead of in the production of hats, he could by the supposition secure a return of 120 quarters? And, on the other hand, why should the agriculturist give *more* than 120 quarters of wheat for 240 hats, when, by employing 100 quarters or its equivalent in the production of hats, he can procure 240?

Again, a shoemaker employs a capital equal to 100 quarters of wheat in maintaining labourers

BOOK III.

employed in the production of shoes. With this capital he can manufacture and bring to market in one year 360 pairs of shoes: he will not exchange these 360 pairs of shoes for less than 120 quarters of wheat; and for this reason, that by transferring his capital of 100 quarters of wheat from the production of shoes to the production of corn, he can secure a return of 120 quarters.

On the other hand, neither the agriculturist nor the hatmaker will give more than 120 quarters of wheat for 360 pairs of shoes, because either of them, by employing his capital of 100 quarters in the production of shoes, can secure a return of 360 pairs.

CHAPTER IV.

Money—great inconvenience would attend the employment of any consumable commodity as money.

It has been already explained how any exchangeable commodity may be made to perform the functions of *money*, though not so efficiently as one or other of the precious metals. If, for example, under the circumstances just supposed, wheat were to be considered the common equivalent for and measure of the rising and falling value of hats and shoes, one quarter of wheat would be of equal value with two hats or three pairs of shoes, or, which is the same thing, the price of a hat would be half a quarter of wheat, and the price of a pair of shoes one-third of a quarter.

But great inconvenience would very soon be found to result from the use of most consumable commodities as money. "Besides many other inconveniences that substances of this nature are subject to, there is this grand objection, that the quantity may be enlarged almost at pleasure, and in a very short space of time, and thereby a vast fluctuation effected in the relative value. But who would readily accept in exchange an article that might perhaps in a few moments lose the half or three-fourths of its value? Wherefore, the commodity employed as money must be of such difficult acquisition as to ensure those who take it from the danger of sudden depreciation."* For this reason, gold and silver have been adopted by men in all civilized countries and in all ages as the fittest measure of the value of other commodities, and the best instrument for effecting the exchange of such commodities with each other.

It will be necessary in this place, and before extending farther the argument on profits, to introduce such observations on the general principles of money and currency as are necessary to a right understanding of what is to follow.

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* Say's Political Economy, book i. ch. xxi.

CHAPTER V.

Metallic money—laws by which the price of the metal forming the material of money is regulated.

AMONG the properties which peculiarly adapt the precious metals, or gold and silver, to be employed as *money*, or a universal equivalent, it may suffice, without attempting a complete enumeration, to note the *six* following, viz. :—

1. Their *uniformity of value*, which is greater than that of other commodities, inasmuch as the precious metals are less liable than other subjects of exchange to a sudden increase or diminution of quantity.

2. Their *uniformity in quality*. The physical qualities of pure gold and silver are at all times and in all places exactly the same, wherever found, and whether dug from the mines of the new or of the old world.

3. Their *divisibility.* Gold and silver (especially gold) are capable of being divided into parts almost inconceivably minute, and these parts may be re-united without any sensible loss.

4. Their *portableness.* The precious metals possess great value in small bulk, yet their bulk is not too small for the purposes of trade and the business of ordinary life.

5. Their *durability.* When sufficiently mixed with alloy, gold and silver are capable of resisting considerable friction—they are not easily destroyed by fire, and not at all by damp or rust.

6. They are *not easily counterfeited.* Their capability of receiving and retaining impressions enables the issuer of money to affix to certain portions of these metals a stamp, which is a public guarantee of their weight and fineness; and their specific gravity, which differs from that of other metals of the same bulk, facilitates the detection of counterfeits.

It seems of little importance whether gold or silver be selected as the standard of money; but *one* of these metals can alone form a standard.

The weight and fineness of the coins of a country are matters of arbitrary arrangement. The sovereign power of the state orders a pound, an ounce, or any other determinate quantity of the metal to be coined into a certain number of pieces. Each has a peculiar stamp affixed to it, which is a public voucher that it is of legal weight and fineness. But this is all which is effected by coinage. It is of no importance *what* the legal weight and fineness are, so that they be *fixed* and *known*; "but, *once settled*, it is the interest of every country THAT THE STANDARD OF ITS MONEY SHOULD BE INVIOLABLY AND IMMUTABLY KEPT TO PERPETUITY; for whenever that is altered, *upon what pretence soever*, the public will lose by it."*

If the laws shall order that any one who carries to the mint a pound troy of gold bullion containing eleven parts of pure gold and one of alloy, or, to use the technical phrase, eleven parts, or 22 carats, fine, shall receive in return, instantly and free of expense, 46$\frac{29}{40}$ coins called Sovereigns or Pounds-sterling, it would follow that in the country where that law prevails the price of an ounce of standard gold (gold by the supposition being the sole material of money) cannot exceed a twelfth part of 46$\frac{29}{40}$ sovereigns, or L.3, 17s. 10½d.

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* Locke's Considerations of the Lowering of Interest, &c., Works, fol. edition, 1722, vol. ii. p. 49.

We have already seen that no commodity can rise or fall in value except in relation to some *other* commodity—that it cannot rise or fall in value in respect of itself; and if this be true of all commodities, it is true of gold, a commodity which by the hypothesis forms a fixed measure of the rising or falling value of every other commodity in the market.

The *money price* of *gold bullion*, when that metal forms the sole material of the currency, in other words, the value of gold bullion estimated in *gold coin* of standard weight and fineness, cannot be raised or depressed like the money price of other commodities; for if it could, the gold currency would cease to be a fixed measure of value.

Nor will any conceivable increase or diminution of the supply of bullion make the slightest difference *in this respect.*[*] An enlargement or abridgment of the supply of gold will no doubt cause the value of all *other* things to rise or fall in relation to gold, but gold itself will still continue a fixed measure of the rising or falling value of all other commodities in relation to each other.

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[*] See Note (C) at the end of the volume.

CHAPTER VI.

Six conditions which must be observed in the coinage and issue of metallic money.

BOOK III. A JUST *theory* of money requires us to consider coins simply as portions of the material of which they are composed, and they are so *in fact* when issued under the following conditions.

1. The metal selected for coinage must be homogeneous, uniform in quality, and capable of being converted from bullion into coin, and from coin into bullion again, without loss either in weight or fineness.

2. The mint must be open to every one who may choose to carry bullion thither for coinage.

3. The bullion when carried to the mint must be converted into coin instantly and gratuitously, without delay or loss of interest,

and without seignorage or deduction of any kind.*

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* The *immediate* and *gratuitous* convertibility of the metal into coin is a consideration of great practical as well as theoretical importance. Where this quality of convertibility is clogged and fettered, a metallic currency cannot be regarded merely as a portion of the metal of which it is composed; bullion and coin become, in some degree, distinct commodities, and even where melting and exportation are allowed, the value of either may rise or fall (though only to a small and that an ascertainable extent) according as the total supply of the one bears a less or greater proportion to the total supply of the other.

It is on this principle that a bar of gold which in London shall be worth its own weight in sovereigns, may at Dublin or Liverpool exchange for a less sum, because its quality of convertibility into money is clogged with the expense of *transit* with its attendant risk and loss of interest. But the amount of this expense is the *limit and measure of the deviation* of the market price from the mint price, and, subject to correction for this expense, the market price of the material of money will coincide with the mint price.

It is on the same principle that a given sum of the money of one country will sometimes exchange for a greater and sometimes for a less sum of the money of another country exactly equal to it in weight and fineness. Suppose that a *sovereign*, for example, contained exactly the same weight of gold of the same fineness as a *half-eagle* of the United States of America, a hundred sovereigns could in that case be converted into a hundred half-eagles without loss or gain;

4. *One* metal must form the only material of money, the sole basis of the currency, or subsidiary coins of other metals, if allowed (as is the case with our silver and copper coins), must be so regulated that the metal forming the standard shall not come to be valued in such subsidiary coins, or be driven out of circulation by them, or by paper money not instantly convertible into the standard metallic money at the option of the holder.

but if the expense of transit were two per cent., then a hundred sovereigns, if sent to America for coinage, might be worth only 98 half-eagles, or conversely, 100 half-eagles, if sent to London for coinage, might be worth only 98 sovereigns. Hence, even where the currencies of two countries are in a state of perfection, the exchange may deviate, on either side, from par by a sum equal to the expense of transit, but it cannot deviate farther.

The effect of a *seignorage* on the price of bullion is precisely similar to the effect produced by the expense of transit. A seignorage has always an effect opposite to that of debasement or degradation, whether accompanied with a limitation of the circulation *or not*—it clogs the convertibility of bullion into money with the expense of coinage, and reduces the market price below the mint price by the amount of that expense, whilst debasement has the opposite effect of raising the market price above the mint price.

5. The coin in circulation must be kept constantly up to its full legal standard in weight and fineness.

6. There must be perfect liberty to export and import coin and bullion.

CHAPTER VII.

When these conditions are strictly observed, coins may be regarded simply as parts of the metal of which they are made, and the market and mint price of bullion will coincide; an enlargement or contraction of the circulation will raise or depress the money price of all commodities except the metal forming the material of money.

BOOK III.

If the mint regulations order (as in Great Britain) a *pound* troy of standard gold (or gold eleven parts fine) to be coined or cut into 46$\frac{29}{40}$ *sovereigns* or *pounds-sterling*, an ounce of gold bullion, of the same fineness, or a twelfth-part of a troy pound, will always (while all the conditions we have specified are strictly observed) sell or exchange for a twelfth-part of 46$\frac{29}{40}$ pounds-sterling (L.46, 14s. 6d.), or 3$\frac{143}{160}$ pounds-sterling (L.3, 17s. 10½d.) With us the *third* and *fifth* conditions are not strictly observed (though perhaps they are both observed as strictly as the nature of the thing will well admit of in practice), and consequently the market price of gold bullion is generally somewhat below the mint price, L.3, 17s. 6d., or L.3, 17s. 9d., instead of exactly L.3, 17s. 10½d.

If these propositions then be correct, it follows that the *money price* of an ounce, a pound, or any other given quantity of gold of known fineness is in reality nothing else than *another name* for its weight and purity. A pound-sterling, for instance, is just another name for 5 dwts. $3\frac{171}{623}$ grains of gold, 22 carats fine, and any increase or diminution of the quantity of gold, or the amount of the metallic currency, can no more raise or depress the *money price* of gold bullion, than an increase or diminution of the supply of any commodity can change the *name* of such commodity.

The value of a yard of cloth of a known quality cannot rise or fall in respect of another yard of cloth of the same quality, let the web be long or short. And $3\frac{143}{160}$ pounds-sterling will always be equal to one ounce of gold of the standard of our mint, whether the whole sum in circulation amount to 20 thousand or 20 millions of pounds.

Diminish the quantity of gold in circulation, and you certainly diminish the money price of all other commodities; and this is in effect to raise the value of gold in relation to such commodities, for the same quantity of gold will then exchange for more of every thing else. Again, increase the quantity of gold in circulation, and you raise the money price of all *other* commodities, and this is in effect to diminish the value of gold, for the same quantity of that metal will in this last case exchange for less of every thing else. But this is the whole. In either case, the money price of *all* commodities being raised or depressed by the operation of a cause common to all, they will continue of precisely the same value in relation to each other.

The rising or falling money price of commodities from an enlargement or contraction of the circulating medium may lead to the exportation or importation of specie (as we shall afterwards see when we come to treat of *exchange*); but the money price of gold bullion itself, when the mint regulations are perfect, can never either rise or fall. Why should it? Why should I take *less* than L.3, 17s. 10½d. for an ounce of standard gold, if instantly, and without the smallest loss or inconvenience of any kind, I can have that quantity converted into L.3, 17s. 10½d. worth of the current coin? Or why should I give *more* than L.3, 17s. 10½d. for an ounce of standard gold bullion, if, by throwing L.3, 17s. 10½d. worth of the gold coin into a melting pot, I can immediately obtain that exact quantity of the metal.

CHAPTER VIII.

Effects of a degradation or debasement of the coin —market price of bullion rises, because a greater number of coins required to make up a given weight of the metal.

BOOK III.

THE same law will be found to operate, though, of course, to the derangement of the monetary system, when the coin, by wear or abrasion, is reduced below its full standard weight.

Our gold coin is sometimes wanted by merchants for exportation, sometimes by manufacturers to be used in the arts; in both cases, it is considered simply as so much bullion, and as such its weight and fineness are alone regarded.

The export merchant or the manufacturer who wants a pound troy of standard gold, and is obliged (by reason of the deficient weight of the coin) to melt down 48 sovereigns instead of

$46\frac{29}{40}$ sovereigns, will as readily pay L.4 an ounce for the metal as before he would have paid L.3, 17s. 10½d. for that quantity; for whether he melt down four sovereigns, or pay L.4 to obtain an ounce of bar gold, is to him a matter of pure indifference.

If some of the pieces are heavier than others, the money-jobber will now find employment; he will cull out all the pieces of full weight as they come from the mint (or rather all the pieces of which *fewer* than 48 will make up a pound troy); these he melts, and sells as bullion at the higher market price; the lightest pieces, those which are most worn and degraded, are alone left; the evil increases; *sixty* sovereigns are, perhaps, now required by the merchant or manufacturer to make up a pound troy; and the market price of an ounce of standard gold accordingly rises to L.5, or a twelfth-part of L.60. The mint is now obliged to buy bar gold at the high market price of L.5 an ounce, for conversion into sovereigns, to be issued at the rate of L.3, 17s. 10½d. an ounce, which sovereigns are no sooner issued than they are again melted and resold as bullion at the market price.

Throughout the whole of this process, the same law of value continues to operate; the coin is still considered a part of the metal of which it is composed, and a pound troy of that metal sells for 40, 60, or 70 pounds-sterling, simply because 40, 60, or 70 sovereigns are required to make up this weight.

The debasement or degradation of the coin does not enhance the money price of commodities *other* than bullion, unless accompanied with an enlargement of the circulation.* When the coin is reduced below its standard weight by wear or by illicit practices, it cannot be so readily increased, for the heavier coins always disappear as soon as issued. A metallic currency which is degraded by law is always increased in numerical amount, for the debasement induces a redundancy; but it is the enlargement and *not the degradation* which is the specific cause of the enhancement of general money prices.

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* See Note (D) at the end of the volume.

It is of importance then to keep in mind,

1. That degradation or debasement of the coin, whatever be the amount of the circulation, always raises the money price of *bullion*, or the material of the coin.

2. That degradation or debasement of the coin, unless accompanied by an enlargement of the circulation, does not raise the money price of *other* commodities, but that a degradation of the coin by law generally is followed by enlargement.

3. That enlargement without degradation or debasement will not raise the price of bullion, or the material of the money in which that price is estimated.

4. That enlargement without degradation or debasement will raise the price of *all* commodities *excepting* bullion.

CHAPTER IX.

Profits—former hypothesis resumed—money now introduced—the country supposed to have mines of its own—the money price of commodities will be greater or less according as a greater or less supply of the material of money is obtained by the employment of a given capital—an ordinary or average rate of profits still maintained in all departments of production, whatever money prices may be.

BOOK III.

To return to the subject of *profits*, we have already seen, that in a country having no money, but carrying on its trade by barter, and where the profits of agriculture were 20 per cent., no manufacturer who employed a capital equal to 100 quarters of wheat on the production of a commodity, would exchange his product for less than 120 quarters of wheat.

Let us now suppose the country in question to have gold mines of its own, and that a mint is established for the free and immediate conversion of the produce of these mines into coin; all the six conditions already mentioned being strictly observed.

Let us farther suppose, that a capital equal, as in the former cases, to 100 quarters of wheat, is employed in *mining* operations; and that the yearly return is found to amount to 4 lbs. troy of gold of the fineness of the British standard (equal, when coined, to L.186, 18s.) for every 100 quarters of wheat expended on the maintenance of mining labour.

In these circumstances, it is certain that the miner would not exchange this sum of L.186, 18s. for less than 120 quarters of wheat, and for the reason already given; why should he exchange L.186, 18s. for less than 120 quarters of wheat, when, by employing his capital of 100 quarters in agriculture, in place of in mining, he could obtain a return of 120 quarters? And, on the contrary, why should the agriculturist give *more* than 120 quarters of wheat for L.186, 18s. of the gold currency, when, by employing his capital of 100 quarters in mining, in place of in agriculture, he could obtain a quantity of gold bullion equal to that sum?

For the same reason, the miner will not exchange his money for *hats*, except at the rate of L.186, 18s. for 240 hats; nor for shoes, except at the rate of L.186, 18s. for 360 pairs of shoes; for, by employing the same capital in either of these departments, he could obtain the return he demands; while, on the other hand, the hatmaker and shoemaker will not exchange these quantities of their commodities respectively for *less* than this sum, because each could obtain that sum by employing his capital in the production of gold.

In this state of matters, then, the money value or *price* of the four commodities to which we have referred will be as follows:—

4 lbs. troy of standard gold bullion, at L.3, 17s. 10½d. per ounce,	L.186	18	0
120 quarters of wheat, .	186	18	0
240 hats, ...	186	18	0
360 pairs of shoes, . .	186	18	0

Or, wheat will sell for 31s. 2d. per quarter, hats for 15s. 7d. a-piece, and shoes for 10s. 4½d. a-pair, nearly.

The money value of the capital of 100 quarters employed in each case will be.	L.155	15	0
And the money profits 20 per cent. on that sum, or . . .	31	3	0
	L.186	18	0

Again, suppose the return from 100 quarters of wheat employed in the support of mining labour amounts to 8 troy pounds of standard gold, then the money price of the four commodities will be as follows:—

8 lbs. troy of standard gold, at L.3, 17s. 10½d. per ounce, . . .	L.373	16	0
120 quarters of wheat, . .	373	16	0
240 hats, ...	373	16	0
360 pairs of shoes, . . .	373	16	0

Or, wheat will sell for 62s. 4d. a-quarter, hats for 31s. 2d. a-piece, and shoes for 20s. 9d. a-pair, nearly.

In this last case the money value of the capital of 100 quarters employed by each producer will be	L.311	10	0
And the money profits 20 per cent. on that sum, or . . .	62	6	0
	L.373	16	0

But it may be asked, since the money price of gold bullion neither rises nor falls, how *can* profits continue at the *same rate* of 20 per cent. *after* the return from *precisely the same amount of capital* has been *doubled?* In order to solve this apparent difficulty, it is only necessary to consider that, after the increased supply of gold has been obtained from the mines, those who employ their capital in mining operations either bring their additional produce to market, or they do not. If they do not, then such produce is *extra commercium*, and consequently we cannot reason upon its value; but if they do bring their additional produce to market, *and thereby double the amount of the circulating medium*, the *money price of all things* will be thereby *doubled;* and, among other things, the *money price of mining labour, or the money value of the miner's capital* (which we have supposed equal to 100 quarters of wheat), *will be doubled*, leaving *exactly* the old profit of 20 per cent.

In the first instance, the miner employed 100 quarters of wheat, equal to .	L.155	15	0
And he obtained a return of .	186	18	0
Leaving a profit of 20 per cent., or	L.31	3	0

But after the increased produce, the money value of the capital of 100 quarters is equal to	L.311	10	0
And he obtains a return of	373	16	0
Which leaves him a profit of 20 per cent., or	L.62	6	0

He has thus a greater *nominal* return, but nothing else; for, after the addition to the circulation, L.62, 6s. will purchase precisely the same number of hats and shoes, now doubled in price, which one-half of L.62, 6s., or L.31, 3s., would have purchased before; and he can buy no more wheat or labour with L.311, 10s., than he could have procured formerly for one-half of that sum, or L.155, 15s.

If any doubt on the subject shall still remain, it may be proper farther to consider what would be the consequence were mining profits 40 per cent., while profits in agriculture and other employments were only 20 per cent. Capital in that case would be instantly attracted from other employments to mining; and by this transference of capital, the quantity of gold in circulation would be increased, till, by the consequent enhancement of general prices, and, among other things, of the price of mining labour and capital, no greater surplus was left to the producer of gold than the common and ordinary surplus of 20 per cent. Or, to put the matter in another light, after the return from 100 quarters expended in the maintenance of mining labour should have reached 8 troy pounds, or L.373, 16s., the agriculturist would not give more for that sum than 120 quarters of wheat, for, by employing 100 quarters in mining, he could himself obtain 8 troy pounds, or L.373, 16s.

The change effected in this case, as in others, would be solely in the price of labour and commodities. Gold is a fixed standard, and its value can neither rise nor fall *in relation to itself.* An ounce of standard gold cannot be exchanged for an ounce and a half of standard gold, or any greater or less quantity than an ounce, let the total amount in circulation be what it will; but by increasing the total quantity of gold in circulation you raise the money price of labour, corn, and every other commodity in a corresponding degree, and you *increase the cost of pro-*

ducing gold itself up to that point at which the product comes to be divided between the capitalist and labourers in exactly the same proportion as in other employments; or, as in the instance just supposed, 20 to the one and 100 to the other.

Again, suppose that the mines, instead of becoming *more* productive become *less* productive, and that a capital equal, as in the former case, to 100 quarters, is employed with a return of 2 lbs. troy, or L.93, 9s., instead of 4 lbs. troy, or L.186, 18s.; there would in this instance be no *immediate* fall of general money prices; but it is evident, on the principles already stated, that the business of mining would not be continued if the rate of profits in that employment were only 10 per cent., while in other employments it was 20 per cent. Mining, then, would be discontinued; the existing stock of gold in circulation would by and by be reduced, and this reduction would go on till the money price of all things, through the contraction of the circulation, should fall to one-half the former amount; *the money price of mining labour would also fall one-half*, and then the business of mining would be resumed, and things would go on as before. The miner's outgoings would now be

	L.77	17	6
And his return 2 lbs. troy of standard gold at L.3, 17s. 10½d. per ounce, ...	93	9	0
Leaving a profit of 20 per cent., or	L.15	11	6

The capitals employed by the agriculturist, the hatmaker, the shoemaker, would each be still equal to 100 quarters; but the money price of 100 quarters would, after the limitation of the circulation, be reduced to L.77, 17s. 6d., the return in each of these employments would still be equal to 20 quarters (or 20 per cent.); but the money price of 20 quarters would be reduced to L.15, 11s. 6d. The price of wheat, of hats, and of shoes being now only one-half what it formerly was, each producer would after the change have the same command over his neighbour's product, and the producer of gold, notwithstanding his diminished return, would, after money prices had fallen in all departments, exchange *his* product for exactly the same quantity as before of every other product.

It is thus seen that under all circumstances the rate of profits would continue permanently at the common or average rate of 20 per cent. For a time, and in particular departments, the actual rate might deviate either on the one side or the other; but to this it would return: the money price of the products in all the departments of industry rising or falling with the money price of the advances, and the money price of mining labour and capital also rising or falling to the exact amount required to leave the average rate of profits and no more.

CHAPTER X.

Same hypothesis—money supposed to be procured through the medium of foreign trade.

HITHERTO we have proceeded on the supposition that the mines are situated in the country in which these results are supposed to take place. But the reasoning will hold equally good though we suppose a country to have no mines of its own, and its gold to be procured through the medium of foreign trade.

In order to explain the mode in which the precious metals are equalized over the different countries of the world, it will be necessary afterwards to resume this investigation when we come to treat of the foreign exchanges; but in the mean time let it be supposed that the person who is desirous to procure gold, instead of employing his capital directly in mining, employs it in working up exportable commodities, to be sent abroad and exchanged for gold. Suppose that, with an outlay of 100 quarters of wheat, or L.155, 15s., exportable commodities are produced, which can be exchanged for as much gold as will produce at the mint L.186, 18s.; the profits of the export manufacturer are in this case 20 per cent., and the money price of all things will be adjusted according to the quantity of gold imported at this rate.

Suppose again that the natural productions of the country which were formerly sent to the foreign market are exhausted, or that, from some cause or other, it becomes necessary to work up and export commodities which are less valuable in proportion to their bulk, and in consequence that, with the same outlay, no more gold can be obtained than will produce at the mint one-half of the former sum, or L.93, 9s. Under these circumstances, as average profits are supposed to be 20 per cent., and as profits cannot at the same time and place be different in different employments, gold will cease to be imported, till, through the consequent reduction of the existing supply of money, the cost of producing the commodities for exportation shall fall from L.155, 15s. to L.77, 17s. 6d. When this effect has been produced, profits will be restored to their former level of 20 per cent., and the exportation of commodities and importation of gold will again go on as before.

Again, if a country be so situated as to be enabled to export commodities which are *more* valuable in proportion to their bulk, or, from improvements in its manufactures, to work up and export commodities which will exchange for a larger quantity of gold in proportion to their cost, the same results will take place as from increased productiveness of the mines. With an outlay of 100 quarters of wheat on the production of commodities for exportation, we may suppose as much gold to be procured as will produce at the mint L.373, 16s. Profits in that department will for a time be greatly above the average rate, and for this reason more gold will continue to be imported, until, through the consequent abundance of money, general prices will rise. And this exportation of commodities, and importation of gold, and elevation of money prices, will go on, until the expense of producing the commodities for exportation shall rise to L.311, 10s., at which point the return will be reduced to L.62, 6s., and profits will regain their former level of 20 per cent.

CHAPTER XI.

An ordinary or average rate of profits cannot be maintained, unless there be in some department of production a NATURAL *rate of profits, self-regulated, and not subject to be elevated or depressed artificially or arbitrarily.*

BOOK III.

OUR object hitherto has been to show that the rate of profits in the various departments of industry cannot be different in the same country and at the same time; in other words, that there is in every society a certain ordinary or average rate of profits, which is maintained by the transference of capital from less profitable to more profitable employments.

In all the departments of trade there is a constant rivalry and competition. Every man tries to better his condition by profitably extending his business, or embarking his capital in new projects and speculations. But with the increase of capital profits would inevitably soon fall to the lowest point compatible with replacing the existing stock, did there not exist some one department of industry and production free to competition, and capable of extension, but in which there is what may be called a NATURAL rate of profits—a rate of profits *self-regulated*, and incapable of being elevated or depressed arbitrarily.

Profits have been correctly enough defined to be the difference between the value of a product and the cost of its production; but it is necessary to analyze this element of value, and show *why it is* that the value of a commodity when sold or exchanged is greater than the combined value of the labour and materials employed in its production.

There would appear to be no natural law, nothing *in the reason of the thing*, which should make a pair of stockings which cost 1s. 8d. sell for 1s. 10d., *because* profits in other departments are at 10 per cent. We see clearly how, by artificially *adjusting* the supply to the demand, the commodity in question can be made to sell for 1s. 10d., or a higher or lower price; and we also see that the price is not raised higher than 1s. 10d., from the manufacturer's fear that he shall be undersold by another producer, and not sunk lower than 1s. 10d., from the manufacturer's consciousness that he can realize 10 per cent. in another department. But then it is not enough to *assume* the existence of a common or average rate of profits, for we still want to know how, in a country where capital abounds, and where consequently it is difficult to find a profitable investment for capital, this average or ordinary rate of profits is fixed, and when fixed, maintained. In short, we want to know what this element of profits *is*, whence it arises, and how it is regulated. If profits be merely the result of an arbitrary adjustment of supply to demand, why should the natural and constant tendency of profits in every country be to fall, and not to rise?—why should another man attempt to undersell me, when he discovers that my profits are higher than his own, instead of elevating his own to the level of mine? or, if he do attempt to undersell me, why should the competition stop at the point of ordinary or average profits, and not go on, with the increase of capital in all departments, down to the lowest point which is consistent with keeping up the existing stock?

In order to solve these questions we must go in search of some employment where there is what we may venture to call a natural rate of profits—some department in which the ratio between the value of the product and the cost of production is not subject to be artificially and permanently altered by an arbitrary enlargement or abridgment of supply.

CHAPTER XII.

This Natural or Regulating rate of profits is not to be found in any of the departments of manufactures.

BOOK III. LET us now return to the example given in the ninth chapter of this Book, and begin our search among the four departments of agriculture, mining, and the manufacture of hats and shoes. And first, let us take the case of the hatmaker.

He employs a capital of 100 quarters of wheat, or L.155, 15s., and his product is 240 hats. On the principles already stated he will not part with these 240 hats for *less* than 120 quarters of wheat, or 4 lbs. troy of standard gold, equal at the supposed mint price to L.186, 18s.; for, on the one hand, had he laid out his 100 quarters in agriculture, he would have had a return of 120 quarters, or, on the other, had he laid out L.155, 15s. in mining operations, he would have had a return of L.186, 18s. He knows, however, that the value of his commodity, in relation to money or other products, depends on the quantity of that commodity which he manufactures and brings to market in a given time; and hence he endeavours to adjust the supply to the demand, so that the price shall be equal, and no more than equal, to the cost of production, with the common and ordinary profits. If capital be withdrawn from this trade, prices and profits will immediately rise in consequence of the diminished supply, and will continue higher as long as the capital so withdrawn is withheld; and, on the other hand, if additional capital be embarked in this trade, prices and profits will fall in consequence of the enlarged supply, and will continue lower until this additional capital is again withdrawn.

And what is true of this trade is true of every other department of manufactures. Profits in all these departments depend upon the price of the product, while the price of the product, be it high or low, does not affect the cost of production. The rate of profits in such departments, therefore, is flexible, and depends on the ratio between supply and demand, and being the result of an artificial adjustment, it does not regulate, but is itself regulated by, the rate of profits in some other department.

CHAPTER XIII.

Nor is the Natural and Regulating rate of profits to be found in that department which furnishes the material of money.

In pursuing this investigation, let us next take the case of the *miner;* and let us suppose that a part of the capital employed in mining operations is withdrawn, and in consequence, that the supply of gold is reduced below what the wants of circulation require. The money price of all commodities will continue to fall, as the existing stock of gold continues to wear out and decrease. This will not alter the rate of profits in any department of manufactures or production, because the money price of *labour*, and of *commodities the products of labour*, is diminished at the same time, and in the same proportion. If the money price, for example, of 120 quarters of wheat be reduced from L.186, 18s., to L.93, 9s., the money price of the farmer's outgoings, equal by the supposition to 100 quarters, is also reduced from L.155, 15s., to L.77, 17s. 6d.; the *difference* between the money value of the product and the money cost of its production (or the *profits* of the agriculturist's capital) is still 20 per cent.

Nor, in reality, will the cultivator be a poorer man after than he was before this reduction, for his hats, his shoes, and all other commodities which he requires to purchase, or wishes to consume, are reduced in price at the same time that his own product is reduced in price, and in exactly the same proportion.

But although the supposed withdrawal of capital from *mining* will not and cannot alter the rate of profits in agriculture or in any of the other departments of trade, it will and must enhance the profits of mining capital, for the return in *that* department is, by the supposition, as great as before, *in proportion* to the labour and capital employed in mining. But less labour and capital *on the whole* being now embarked in mining operations, and the supply of gold *on the whole* being diminished to a corresponding extent, *the money value of that labour and capital* will be *reduced*, and the *rate of profits* (or the *difference* between the cost and product) consequently *enhanced*. But when this consequence is perceived, the capital which before was withdrawn will be *attracted back* to the department of mining; the supply of money will be again increased, the money price of the labour and capital employed will be again raised, the difference between the cost and product reduced, and the rate of profits again restored to the general level.

Again, suppose that, instead of capital being withdrawn from mining, additional capital is transferred to that department, and that, in consequence, the supply of gold in circulation is enlarged. This will cause an elevation of the money price of all commodities; but this rise of money prices will not alter the general rate of profits, because the money price of labour, and of all commodities the products of labour, is elevated simultaneously and in the same proportion. If the money price of 120 quarters of wheat be raised from L.186, 18s. to

L.373, 16s., the money price of the farmer's outgoings is also raised from L.155, 15s. to L.311, 10s.; the *difference* between the money value of the product and the money cost of its production (or *profits*) will still be 20 per cent.

Nor is the producer of corn in this case a richer man after than he was before this general elevation of prices; for the money price of his shoes, hats, and all other commodities which he may have occasion to purchase, is elevated at the same time and in exactly the same proportion.

But although this transference of additional capital to the production of gold, or the material of money, will not cause any alteration of the rate of profits in *other* departments of trade, it will reduce the profits of mining capital; for although the return is, by the supposition, no greater *in proportion* to the labour and capital employed in mining than it was before, yet more labour and capital, *on the whole*, being now embarked in mining operations, and the supply of money, on the whole, increased, *the money value of that capital* will be enhanced, and the rate of *profits* (or the *difference* between the cost and product) consequently *reduced.* The moment this result is perceived, however, the additional capital which had been attracted to mining will be *repelled*, and will not return until the gold in circulation be again diminished, the money price of the miner's outgoings reduced, the difference between the cost and product again increased, and the rate of mining profits elevated to its former level.

It is thus seen that the rate of profits in that department which furnishes the material of money is flexible, as in other departments of production, that it is the result of an artificial adjustment, and, of consequence, that the ordinary or average rate of profits is not regulated by, but does itself regulate, the rate of profits in *this* department. We must therefore still go on with our search.

CHAPTER XIV.

A digression—limits of demand.

BOOK III.

It has been already shown that the consequence of embarking capital beyond a certain limit in mining operations, or in working up commodities to be exported and exchanged for gold or the material of money, and of thereby increasing the amount of the circulation *beyond that point* at which *the difference* between the miner's or export manufacturer's *outgoings* and *returns* is equal, and no more than equal, to the ordinary rate of profits, which we have supposed to be 20 per cent.;—that the consequence of thus enlarging the circulation, and increasing the money price of mining or manufacturing labour and capital, is *a fall of profits* in that department which furnishes the material of money.

The gold in circulation being increased without a *corresponding addition* to the numbers of the people—to *the supply of labour*,—the price of labour rises, and the additional money wages diminish the difference between the cost and return; in other words, diminish the profits of the capital employed. We may even suppose (for the thing is at least possible) that the addition to the circulation might be so great as to make the money wages of mining labour equal to the entire product, and so leave no profits whatever.

But this could not happen were the numbers of the people, or the *supply of labour*, enlarged at the same time that these additions were made to mining capital. Every addition to the money in circulation, without a corresponding addition to the population, must be followed by a rise of money wages. We have supposed the capital employed to be represented by 100, and the return to be represented by 120. After the transference of additional capital to mining, the return would still be represented by 120; the capital, the labour employed, would still be the same; but after the enlargement of the total circulation, the money value of that capital would be raised, and the capital might then be represented, not by 100, but by 110 or even 120; and, in the one case, profits would be reduced; in the other, annihilated.

The length to which the miner can go therefore in increasing the circulation, without reducing his profits below the average level, depends on the supply of labour in the market; in other words, on the numbers of the population. If he go beyond the point which we have indicated, he gluts the market, and demand would seem to be measured by the power possessed by all classes of producers to exchange their commodities with the money in circulation, in such proportions as to leave to them, and also to the producer of the material of money, a surplus equal, and just equal, to the ordinary rate of profits.

CHAPTER XV.

The Natural or Regulating rate of profits is discovered in that department of production from which the food of the great body of the people is derived.

To return to the main subject of our inquiry, let us suppose that additional capital, instead of being transferred to manufactures or mining, is transferred to agriculture; there being still, according to our original hypothesis, no gradation of soils, and the average return in this department being 20 per cent., or 120 for every 100 quarters employed.

Corn, as we have already remarked, has a market price as well as a natural price. Its market price, as we have seen, is regulated by the proportion between supply and demand. If capital, therefore, be transferred from other departments to agriculture, the immediate effect will be an increased supply of corn, and consequent fall of its market price.

The *money price of corn* will now be *less* than it was before, because the quantity of that commodity in the market is now *greater* than before, in proportion to the amount of gold in circulation.

The value of labour, estimated in *corn*, will be greater than it was before; but the *money price of labour*, or its value estimated in gold, will be neither elevated nor depressed, for the supply of labour in the market is neither less nor greater in proportion to the amount of gold in circulation.

The labourer receives the same money wages after as before the change; but after the change, these wages give him a greater command over food, while the producer of corn receives a less money price for his commodity, and has a diminished command over labour, gold, and every other product. Here then we have a temporary fall of the profits of agriculture.

Now this state of things will either *continue*, or it will not; and let us see the result either way:—

1. If the fall of profits consequent on the

change in the money price of corn *repel* the additional capital from agriculture, then the supply of corn is again diminished, the market price is again raised, and profits are restored to their former amount.

But if so, in what does agriculture differ from other employments? If profits in that department are thus artificially adjusted, we must look elsewhere for a regulating or natural rate of profits. But agriculture does differ from other employments, and the difference lies here,—if you transfer too great an amount of capital to manufactures or mining, profits in these departments will not only be lowered, but will *continue low* until this additional capital be again withdrawn. If you could *keep* the market overstocked, prices and profits in these departments would thereby be kept *permanently down* to the new level. *Unless* you withdraw the additional capital, prices and profits will *never rise*, for they were *created* by artificial means, and they cannot be maintained, raised, or lowered, but by the same means. But in agriculture it is altogether different; for,

2. Although the additional capital which we

have supposed to be transferred to agriculture be *not* withdrawn, profits, by a *self-regulating* process, will return to their former level, and cannot, by any artificial method, be kept above or below that level.

Observe how the case stands. The money price of *corn* is reduced, because the supply of that commodity is greater in proportion to the money in circulation. The money price of *labour* is *not* reduced, because the supply of labour is *not* greater in proportion to the money in circulation. Labourers in all departments have now an increased command over food, for their money wages are the same, while corn is cheaper than formerly. Their money wages are the same, for although, by transferring capital to agriculture, you transfer labour, you neither enlarge the demand for labour on the whole, nor do you limit its supply.

But the additional command which the labourer has acquired over food will, according to the principles with which we set out, be immediately, and as a certain consequence, followed by an addition to the numbers of the people; an addition to the supply of labour in the market; and the multiplication of numbers will go on till the money price of labour be as much reduced below its former price as the money price of corn has been; and the former ratio of population to food—of labour to corn—being thus restored, the labourer will regain his former command over food.

But the *moment this consequence actually results*, the former ratio between the cultivator's outgoings and return, in other words, the former rate of his profits, is also restored. The money price of 120 quarters of wheat was perhaps reduced by the enlargement of the supply from L.373, 16s. to L.186, 18s.; but the money price of labour, by the consequent increase of numbers, is *also* now reduced from L.311, 10s. to L.155, 15s. The difference between the outgoings and return, or the rate of profits, is in either case exactly 20 per cent. *This* is what we have ventured to call the natural or regulating rate of profits.

CHAPTER XVI.

The ordinary or average rate of profits in all other departments conforms itself to the natural rate.

BOOK III.

THE reduction of the money price of labour, consequent on an increase of population, will cause a temporary elevation of the rate of profits in every department of manufactures. The manufacturer will, consequently, bring more of his commodity to market, till, through this enlargement of supply, the money price of his product is reduced; and the former ratio between the money value of the product and the money value of the labour employed on production will be restored *at that point* at which the difference between the manufacturer's returns and his outgoings is equal to the ordinary rate of profits.

When the money price of labour is thus reduced, the profits of the *miner*, as well as those of the manufacturer, will also, for a time, be greatly elevated, for the price of labour will fall at the same time in all departments of industry. But this fall of money wages, and consequent enhancement of mining profits, will attract additional capital to mining. More capital will be employed in that department, and more gold will be sent into circulation; and this enlargement of the circulation will go on till the amount of the circulating medium bears the same ratio to the supply of labour and commodities as it did before, *i. e.*, till money wages, and the money price of corn and all other commodities, are raised to the former amount, at which point mining profits will regain their original level. General money prices will now be the same as they were before these changes began to operate. This will be the result, at least, *if* the supply from the mines be equally abundant in proportion to the cost of production; but if the supply be not so abundant, then the expansion of the circulation will go on till the money price of mining labour be so high as to leave the miner the ordinary rate of profits, and no more; in this case general money prices will be somewhat lower than before the change, but the rate of profits in all departments will be the same.

CHAPTER XVII.

The order in which the foregoing phemomena of prices and profits will develop themselves.

THE order in which we have noticed these phenomena is not the order in which they will actually exhibit themselves. We have supposed that, *First of all*, there is a transference of additional capital to agriculture, and a consequent enlargement of the supply of corn—a reduction of the money price of corn—greater command given to the labourer over food—a consequent addition to population, or the supply of labour —a fall of money wages, corresponding with the previous fall in the money price of corn— the rate of profits in agriculture reduced to its former level:—*Next*, higher profits in manufactures, in consequence of the reduction of money wages—an enlarged supply of manufactured products, and a reduction of their money price corresponding with the fall of wages—the rate of profits in manufactures again reduced to its former level:—*Lastly*, higher mining profits, in consequence of the fall of money wages—additional capital embarked in mining—and a consequent expansion of the circulation, reducing mining profits to their former rate by its effect on the money price of mining labour, and elevating general money prices (the money value of both outgoings and returns) in all departments, either to their original amount, if the supply from the mines be equally abundant in proportion to the expense of working them, or to a greater or less amount, if the supply be more or less abundant; but under all circumstances making no alteration in the rate of profits.

Now this is not the order in which these effects will actually develop themselves. An addition to the numbers of the people always *precedes* an extension of circulation. The prime motive power is the principle of population.*

Population presses against subsistence; and an increased supply of corn does not *cause*, it merely *permits* an addition to the supply of labour. First of all, then, there is an enlarged supply of labour—a diminished money price of labour—an elevation of agriculture profits—a consequent extension of cultivation, and an additional supply of corn—a reduced money price of corn, corresponding with the previous reduction in the money price of labour—the former rate of agricultural profits restored:—Next, an elevation of manufacturing profits, in consequence of the lower money price of labour—an enlargement of supply—a reduced money price of manufactured products, corresponding with the previous fall of wages—the former rate of profits in these departments restored:—Lastly, higher profits in the department of mining, or that department which furnishes the material of money, in consequence of the lower money price of labour—an enlargement of the circulation, raising the money price of mining labour again till the rate of profits in that department be reduced to its former level, and general money prices in all other departments of production elevated to their original amount.

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* "Is multiplication the efficient cause of agriculture, or is agriculture that of multiplication? I answer that multiplication is the efficient cause of agriculture."—*Sir James Steuart's Political Economy*, book i. chap. 18.

CHAPTER XVIII.

A transference of capital supposed from *agriculture* to *other departments—the rate of profits still self-regulated.*

BOOK III.

We now return to our argument that the rate of profits in agriculture, or that department which furnishes the food of the great body of the people, is *self-regulated*, and cannot, as in other departments, be raised or depressed by artificial means. And in order farther to prove and illustrate this, let us *reverse* the example we formerly gave, and suppose that, instead of additional capital being transferred *to* land, a part of the existing capital employed in agriculture is withdrawn *from* that department.

The effect of such a withdrawal of capital must of course be to abridge the supply of corn, and thereby to raise its market price. The *money value* of *corn* will be higher than it was before, because the supply of corn is now less in proportion to the money in circulation than it was before. The value of labour, estimated in corn (or corn-wages) will be less than before, but the *money value* of *labour* (or money wages) will be neither elevated nor depressed; for the supply of labour, by the supposition, is neither less nor greater in proportion to the money in circulation. The labourer receives exactly the same money wages, though these wages give him less command over food than formerly, while the cultivator receives a higher money price for his corn, in consequence of the diminished supply. Hence there is, for a time, a rise of agricultural profits.

Now this state of things either will be permanent, or it will not; and let us, as we did in the opposite case, trace the result either way:—

1. If the rise of profits consequent on the change in the market price of corn *attract back* the capital which we suppose to have been withdrawn, then the supply of corn will be again increased, and prices and profits in that depart-

BOOK III. ment will be reduced to their former level. But,

2. Although the capital withdrawn from agriculture be *not* again transferred to that department, profits, by a *self-regulating* process, the reverse of that already described, will fall to their original level, and cannot by any artificial means whatever be kept permanently above that level; for the following effects must of necessity result: The *money value* of *corn* being raised, by reason that the supply of that commodity is diminished in proportion to the money in circulation, and the *money value* of *labour not* being raised, by reason that the supply of labour bears the same ratio as formerly to the money in circulation, labourers in all departments have a diminished command over food. But this diminished command over the means of subsistence will, according to the principles already stated, be followed by a reduction of numbers—by a reduction of the supply of labour; and this check to population will continue to operate till the money price of labour be as much raised above its former rate as the money price of corn has been; and the former

ratio of population to food, of labour to corn, being thus restored, the labourer will regain his former command over food.

But the moment *this* result takes place, the former ratio between the cultivator's outgoings and returns, in other words, his former rate of profits, is restored. The money price of 120 quarters of wheat was raised, perhaps, by the contraction of the supply from L.186, 18s. to L.373, 16s.; but the money price of labour, by the consequent reduction of numbers, is also now raised from L.155, 15s. to L.311, 10s. The *difference* or rate of natural profits is in either case exactly 20 per cent.

This rise of the money price of labour will cause a temporary depression of the rate of profits in the various departments of manufactures. The manufacturer will, consequently, bring less of his commodity to market, till, through the contraction of supply, the money value of his product is raised, and the former ratio between the money value of the product and the money value of the labour employed on production will be restored at that point at which the difference between the value of the

BOOK III. manufacturer's returns and outgoings is equal to the ordinary rate of profits.

Again, when the money price of labour is thus raised, the profits of the miner, or producer of the material of money, must also be greatly reduced. But this rise of money wages, and consequent fall of mining profits, will *repel* capital from mining undertakings, till, through the wearing out of the existing supply of the precious metals, or their consumption in the arts, the circulation will be reduced, and the money value of labour will be also reduced *so far*, that money wages shall be no higher than they were before these changes began to operate. At this point mining profits, and also general money prices will regain their original level. This will be the effect, at least, if the supply from the mines be neither more nor less abundant in proportion to the cost of production than before. If the supply be more abundant, the money price of labour and all things will be higher; if less abundant, lower, than before; but the rate of profits in all departments will be the same.

CHAPTER XIX.

Profits—how, and to what extent, influenced by the substitution of machinery for direct human labour.

THE consideration that machinery, as well as direct human labour, is employed in the various departments of production, does not alter the conclusions at which we have arrived with respect to the mode in which profits are regulated and adjusted. Nor are these conclusions changed or modified by the farther consideration that the machinery so employed may be of various degrees of durability.

The producer, who employs machinery, must have such returns from the sale of his commodity as shall not only be equal to the ordinary rate of profits on the original cost of the machines, but as shall be sufficient to keep those machines in repair while they last, and replace them when worn out, or he cannot continue his trade. But if the rate of profits in all departments *but one* be, as we have attempted to show, the result of an artificial adjustment, the manufacturer who employs machinery will always limit the supply of his commodity, so that the price shall yield him the requisite return.

It must never be forgotten that all subjects of exchange, and machinery among the rest, are, directly or indirectly, the produce of human labour. Did the manufacturer who employs machinery himself maintain labourers to make and repair his own machines, it would at once be seen that his profits were dependent on the price of labour, and it would be seen that in proportion as his machines were more or less complex, or more or less durable, he must maintain a greater or smaller number of such labourers. But that he purchases these machines from others, who employ capital in the maintenance of labour, does not substantially, or indeed at all, alter the state of the matter. If we are right, therefore, in our other conclusions, it is altogether unnecessary to say any thing more upon this part of the subject.

BOOK IV.

OF RENT.

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OF RENT.

CHAPTER I.

Proposed mode of treating the subject.

We have now arrived at that stage in the progress of society at which we may imagine all the *best* land of the supposed country, that is, the land which yields the greatest return in proportion to the expense of working it, to be fully cultivated, and when, consequently, it has become necessary to have recourse to land of inferior productiveness, in order to meet the growing wants of an advancing population.

Let us now proceed, therefore, to the consideration of the important subject of Rent.

And, to save perplexity, it may be proper in this place to consider exclusively the laws which regulate the rent of *corn-land*, or that land which produces wheat, or whatever else constitutes the food of the great body of the people, laying aside altogether, for the present, the consideration that land, even in its natural and uncultivated state, produces grass for cattle, wood, and other products possessed of exchangeable value.

We shall afterwards take a larger and more complex view of the subject; but in the next chapter we must be understood to regard land as capable of producing corn, and nothing else.

CHAPTER II.

Theory of Rent and Profits—equal capitals being applied to two or more soils of unequal productiveness, Profits are measured by that portion of the gross produce of the least productive soil which remains to the cultivator after replacing his capital—and the Rent of each of the superior soils is measured by the difference between the product of each of these soils respectively and the product of the least fertile land.

LET it be granted that there is in the country supposed (what there is in reality in every country) different soils of varying fertility, which we shall distinguish as Nos. 1, 2, 3, 4, &c.; and that, with a uniform outlay of 100 quarters of wheat, No. 1 yields an average return of 160 quarters; No. 2, a return of 150 quarters; No. 3, a return of 140 quarters; No. 4, a return of 130 quarters; and so on.

When the wants of society and the increase of population demand the cultivation of No. 2, the cultivator of that inferior soil will find that his return is less in proportion to the expense of cultivation than that from No. 1, by 10 quarters, or 10 per cent. on his capital. The capital employed on each of these soils is, by the supposition, 100 quarters of wheat; but the return from that employed on No. 1 is 160 quarters, while the return from that laid out on No. 2 is only 150 quarters, so that the surplus produce in the first case is 60 per cent.* on the outgoings, in the second 50 per cent., and cannot by hypothesis be more or less in either case.

But it has been already shown that there cannot in the same country and at the same time continue to be two unequal rates of profit;

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* It might have been better, perhaps, because more in keeping with the actual state of things, to have stated per centage profits as 20, 15, 10, &c., instead of (as in the subsequent chapters of this book) 60, 50, 40 per cent. This does not affect the reasoning however; and it will be recollected that the argument still has reference to the large returns of a country recently entered upon.

and hence it is abundantly evident that to the cultivator it must be a matter of pure indifference whether he lay out a capital of 100 quarters of wheat on No. 2, with a return of 150 quarters, or give 10 quarters for liberty to cultivate No. 1, with a return of 160 quarters. The difference then between the return from No. 1 and that from No. 2, or 10 quarters, is the RENT of No. 1.

Society still advances, population still increases, and the inferior soils, Nos. 3, 4, &c., are successively brought under cultivation, each with a smaller return in proportion to the capital employed, which we still suppose equal to 100 quarters of wheat.

When cultivation has reached the land No. 2, and proceeded no farther, that land will yield *no rent*, but it will yield 50 per cent. profits; while No. 1 will also yield 50 per cent. profits, and a *rent* of 10 quarters.

When the land No. 3 comes to be cultivated, that land will yield 40 per cent. profits, but *no rent;* No. 2 will yield 40 per cent. profits, and *a rent* of 10 quarters; and No. 1 will yield 40 per cent. profits, and *a rent* of 20 quarters.

Lastly, when the land No. 4 is reached, that land will yield *no rent*, but 30 per cent. profits; No. 3 will yield 30 per cent. profits, and *a rent* of 10 quarters; No. 2 will yield 30 per cent. profits, and *a rent* of 20 quarters; and No. 1 will yield 30 per cent. profits, and *a rent* of 30 quarters.

In all these cases, *if* the ordinary or usual rate of profits in all departments of production be regulated by the surplus produce of the last cultivated and least fertile land (a thing, however, yet to be proved), it becomes a matter of absolute indifference to the cultivator whether he employ a capital of 100 quarters of corn in cultivating No. 4, with a return of 130 quarters, paying *no* rent, or pay a rent of 10 quarters for permission to cultivate No. 3, with a return of 140 quarters; or a rent of 20 quarters for permission to cultivate No. 2, with a return of 150 quarters; or a rent of 30 quarters for permission to cultivate No. 1, with a return of 160 quarters.

Hence it will follow that the least productive land yields a rate of profits exactly equal to the difference between the produce of such land and the cost of production; that all the superior soils yield the *same* rate of profits; and that *each* of the soils, Nos. 1, 2, and 3, yields, over and above the ordinary profits, A RENT exactly equal to the difference between the produce of each and the produce of No. 4.

Hence it will also follow that at every step in the descent of cultivation profits will fall, and rent will rise to an exactly corresponding extent, a part of what was formerly profits being at every such step converted into rent.

CHAPTER III.

Equal capitals being successively applied to the same *soil with unequal returns, Profits are measured by that part of the gross return from the least productive portion of capital which remains to the cultivator after replacing that portion; and Rent is measured by the difference between the gross return from each of the other portions of capital, and the gross return from the least productive portion.*

THE conclusions of the last chapter would not be altered, although, instead of a gradation of soils, we should suppose a country to have only *one* quality of land, if every successive application of additional capital to such land were accompanied with a diminished return.

If from the *first* applied capital of 100 quarters, for example, there was an average return of 160 quarters; from the *second* 100 quarters a return of 150 quarters; from the *third* a return of 140 quarters; from the *fourth* a return of 130 quarters, and so on; the return to the *last* applied and least productive portion of capital would regulate profits, which would in that case be 30 per cent.;—the profits on all the other portions of capital would be 30 per cent., and the rent would be equal to the difference between the produce obtained from each of the portions of capital applied and the produce of the *fourth* portion.

For, profits being regulated by the return from the least productive portion of capital, it is a matter of indifference to the cultivator whether he employ the *fourth* portion, with a return of 130 quarters, paying *no* rent; or the *third* portion, with a return of 140 quarters, paying a rent of 10 quarters; or the *second* portion, with a return of 150 quarters, paying a rent of 20 quarters; or the *first* portion, with a return of 160 quarters, paying a rent of 30 quarters.

CHAPTER IV.

That "rent is paid because corn is high" is a fallacy—a higher money price of corn not a cause *of higher rent, or a condition of extended cultivation, but an accidental* effect *of a fall of profits—Effects of a fall of natural profits.*

HITHERTO we have *taken it for granted* that ordinary profits in all departments are regulated by the return obtained from the least productive land, or (which is the same thing in effect) by the return obtained from the least productive portion of capital applied to superior land; but this must be *proved*, and the more so, as I shall here venture to differ from the distinguished advocates and supporters of the theory of rent first propounded—in its modern form at least—by Mr Malthus and Sir Edward West,* who maintain that *corn is not high because a rent is paid*, which is true, for rent never enters into or influences price, but that *a rent is paid* BECAUSE *corn is high*,† which is a fallacy, for it can be demonstrated that every rise of rent, and every fall of profits, is caused solely by the

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* Mr M'Culloch has claimed for his countryman, Dr James Anderson, the honour of being the earliest expounder of the real nature and origin of rent; and an extract given by Mr M'Culloch from Anderson's long-forgotten pamphlet (*An Inquiry into the Nature of the Corn Laws*), proves incontestably that he broached in 1777 the very same theory which has since become so celebrated.—See, on this subject, Mr M'Culloch's curious and elaborate catalogue of books and authors; with historical, critical, and biographical notices, entitled *Literature of Political Economy* (p. 68),—a work which is not only a useful and seasonable contribution to the science, but is in fact the *best history* of its rise, progress, and present state.

† Mr Malthus compares the soil to a great number of machines, all susceptible of continued improvement by the application of capital to them, but yet of very different original qualities and powers. "*The price of raw produce*," he says, "*naturally rises till it become sufficiently high to pay the cost of raising it with inferior machines, and by a more expensive process;* and as there cannot be two prices for corn of the same quality, all the other machines, the working of which requires less capital compared with the produce, must yield rents in proportion to their goodness." (*Inquiry into the Nature and Progress of Rent*, p. 36.) And again, "*As the price of raw produce continues to rise, these inferior*

machines are successively called into action; and as the price of raw produce continues to fall, they are successively thrown out of action. The illustration here used serves to show at once *the necessity of the actual price of corn to the actual produce*, and the different effect which would attend a great reduction in the price of any particular manufacture, and a great reduction in the price of raw produce." (*Ib.* p. 37.)

Various considerations unite to show the fallacy of this view of rent. (1.) It is inconsistent with plain historical facts, for it has already been shown (*ante*, Note to Book II. ch. 7) that the average price of corn during the 18th century did not exceed the average price of the 17th by more than fivepence a-quarter, while every one knows how much the rent of land has risen, and the profits of stock, as indicated by the interest of money, have fallen, during the same period. (2.) That the descent of cultivation is preceded by a rise in the price of raw produce, as a *necessary condition* of that descent, is a position inconsistent with the view of profits elsewhere given by Mr Malthus himself, for that author represents profits as *limited* by the productiveness of the land last taken into cultivation. (*Principles of Political Economy*, 2d edition, p. 281.) Now, were it true that the money price of corn always rises before the descent of cultivation, the rate of profits never could fall, for the farmer, to his great comfort, would find that whatever he lost in quantity was made up to him in value. The contradiction, therefore, is quite obvious, for soils of inferior productiveness, according to Mr Malthus, will not be subjected to the plough till the money price of corn rise sufficiently high to enable the produce of such soils to yield to the cultivator his diminishing returns obtained from capital applied to land, and that a rise of the money price of corn is an *effect*, and not a necessary and constant, but an adventitious and accidental effect, of the fall of general profits.

Were this part of " the theory of rent" correct, the ordinary rate of profits *could never fall*, for what the cultivator lost *in quantity* by a descent to a less productive soil would be made up to him *in price*, while the landlord would have not only a greater corn-rent at every step in the progress of agriculture, but that increased corn-rent would fetch him a greater money price.

former rate of profits, while, according to the same author, the necessity for cultivating such soils is itself " the limiting principle of profits." If the cultivation of inferior soils be the cause of *limiting* profits, nothing can be clearer than that the *maintenance* of profits cannot be a *condition* of such soils being cultivated. (3.) The doctrine of *the necessity of the actual price of corn to the actual produce*, as laid down by Mr Malthus, is not only plainly contradicted by facts, and opposed to other parts of his system of political economy, but is quite inconsistent, as I have endeavoured to show in the text, with a just theory of rent and profits. I have there endeavoured to prove that the higher money price of corn, instead of being the *cause*, is the *consequence*, though not the necessary consequence, of a descent to inferior soils.

Nor could the diminished fertility of the soil last brought under cultivation regulate, much less *limit*, the ordinary rate of profits, did the *maintenance* of that very rate of profits constitute a *precedent condition* of the cultivation of such soils.

Mr Ricardo and his followers, who have adopted this theory, account for the constant and progressive fall of profits by assuming a constant and progressive rise of the money price of labour, and this higher price of labour they represent as the consequence of the diminishing productiveness of land. They assume that there exists somewhere or other a power *extrinsic* to agriculture, which fixes the rate of profits, and that *before* inferior soils can be brought under cultivation, the money price of corn must rise so high, *and continue so high*, as to yield this assumed rate of profits; and it is not alone *the diminished productiveness* of land, but the *increased price of labour*, caused by this diminished productiveness, which according to them is the specific *cause* of the fall of profits.

We now proceed to inquire how the rate of profits is affected by the descent to inferior soils;

and here it is necessary to revert to the consideration that it is the pressure of population on the means of subsistence, the tendency of population to go beyond these means, which causes successive additions to be made to the food of a country.

The multiplication of numbers, as we have seen, goes on till the *best* land (No. 1) is fully cultivated; but it does not stop there—it tries to go beyond that point. Hence the market is more abundantly supplied with labour than it was formerly, and labour, consequently, whether its value be estimated in money or in corn, becomes cheaper. There is as yet no more corn and no more gold in the market; but there is more labour. The labourer struggles to maintain his standard of comfort and his former habits of living; but there being no more corn, and a greater population to feed, *each* labourer must receive *less* corn than he did before, or a part of the population must starve. At the same time, there being no addition to the amount of the circulation, money wages must fall; so that at the moment when it becomes necessary to divide the same supply of corn among a greater number, each man's command over food is proportionately circumscribed.

But this temporary reduction of the price of labour necessarily causes a temporary elevation of the farmer's profits: the same work which formerly cost him 100 quarters of wheat he can now, we may suppose, have done for 93 or 94 quarters; and when the price of labour is so reduced, the farmer will be content to cultivate land which yields him a proportionally smaller return. When cultivation had not extended beyond No. 1, there was no rent, and the farmer's profits were 60 quarters or 60 per cent. Land No. 2 yields, by the supposition, only 150 quarters, with the same expenditure of labour which produced 160 quarters from No. 1; but a return of 150 quarters from 93¾ quarters makes the rate of profits 60 per cent. Land No. 2 is accordingly now cultivated, and the required addition to the supply of corn is produced and brought to market.

Now mark the consequence of this. The moment the demand of the additional population is *met and satisfied*, corn-wages return to their former rate. We had formerly only more labour; now we have more corn as well as labour, —still no addition to the circulation. Labour is cheaper, but corn is also cheaper; and the money price of *both* having fallen, the labourer has reacquired his former command over food. The money price of both the product and outgoings of the cultivator has been *equalized*, for though both have fallen, they have fallen in an equal degree; and the difference between the cost and product, whatever it be, is the *new* rate of profits.

It must be so, on the principles already demonstrated, without any reference to the consideration of money; for by the increased supply of corn which now meets the increased supply of labour, the former ratio of food to population is restored, and the value of labour, estimated in corn, and of corn, estimated in labour, is brought back to its former amount.

Had there been no land to cultivate but No. 1, this ratio must also have been restored, but in a different way: it would then have been restored by a reduction of the numbers of a half-starved people continuing to struggle with inadequate means of subsistence, that is, by a contraction of the supply of labour; but there *being* more land, the former ratio is restored by such an increase of the supply of corn as affords to each labourer his former command over food.

But in consequence of this readjustment of food to population, of corn to labour, the farmer's outgoings are now raised from 93¾ to 100 quarters, while his return cannot exceed 150 quarters, and profits are consequently reduced to 50 quarters, or 50 per cent. both on land No. 2 and land No. 1; for although the latter yields a return of 160 quarters, 10 quarters *go off* as rent to the landlord.

But the same process of change which we have described as taking place in agriculture must have been felt in all the other departments of trade and production. In *mining*—to revert to our former illustration—the money price of labour must have fallen at the same time that it fell in agriculture, and to the same extent, and from the same cause, namely, an expansion of the supply of labour without a corresponding expansion of the circulation.

Before this change began to operate, when the cultivator's profits were at 60 per cent., no one who laid out a capital equal to 100 quarters of wheat in maintaining mining labour, and obtained from that capital a return of 4 troy lbs. of standard gold, equal at the mint to L.186, 18s., would exchange that sum for *less* than 160 quarters of wheat, for by employing the same capital in agriculture, he could by the supposition have obtained 160 quarters. Nor would the agriculturist give *more* than 160 quarters for L.186, 18s.; for, by transferring his capital of 100 quarters to mining, he could have secured a return of L.186, 18s.

In these circumstances, the money price of a quarter of wheat would be about 23s. 4¼d., and the money value of the capital would

be . . .	L.116	16	3
And the farmer's profits 60 quarters, 60 per cent., or	70	1	9
	L.186	18	0

But after the change we have supposed—after the numbers of the population have increased, and the value of labour, whether estimated in corn or in money, has been reduced by the augmented supply—the miner can probably, with a capital of only 93¾ quarters, or about L.109, 10s., procure the same quantity of gold—(4 lbs. troy or L.186, 18s.)—which he before obtained by the outlay of a capital of 100 quarters, or L.116, 16s. 3d. His profits, therefore, are also *temporarily* raised, and the former check to the enlargement of the circulation being now in some degree relaxed, more gold is sent into circulation, and the increase goes on till wages are again raised from L.109, 10s. to L.116, 16s. 3d.

At this point the *money value* of the *now augmented* supplies *both* of corn and labour has reached exactly its former elevation; but whether the enlargement of the circulation will stop at this point, or go farther, or not so far, depends upon *another* consideration, namely, whether the supply of gold now obtained from the mines, compared with the supply obtained before the change, is as abundant, or more or less abundant in proportion to the capital employed.*

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* Mines, like land, generally yield a rent to their owner. Equal capitals being applied to two or more mines of unequal fertility, profits are measured by that portion of the gross produce of the least fertile mine, which remains to the miner

We have supposed the produce of the mines to be at the rate of 4 troy lbs. of standard gold, or L.186, 18s. for every 100 quarters of wheat, or L.116, 16s. 3d., employed. We have farther supposed the increase of population to have reduced the price of labour *below* L.116, 16s. 3d., or to about L.109, 10s., and the rate of mining profits, in consequence, to have been temporarily raised, and the supply of gold enlarged.

Now, if the supply obtained from the mines be *as* abundant after as before the change, mining profits will be at 60 per cent. *even after* the price of labour has been brought up to L.116, 16s. 3d., and mining profits will not be reduced to 50 per cent. till the money value of 100 quarters of wheat reach L.124, 12s. In this case, therefore, a rise of the money value of corn and labour will be the effect, but the accidental, not the necessary effect, of a rise of rent and a fall of profits; for if the supply from the mines should be *more* abundant, the money value of

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after replacing his capital; and the rent of each of the more productive mines is measured by the difference between the product of each of these mines respectively, and the product of the least fertile mine.

corn and labour will rise still higher, or if that supply should be *less* abundant, the money value of corn and labour will fall still lower, than before the fall of profits. It will, in the one case, continue to rise, or in the other case to fall, till the price of mining labour be so high as, when deducted from the product, to leave only the ordinary rate of profits to the miner.

But the important thing to be noted is, that under *all possible fluctuations* of the value of money, the rate of agricultural profits will not be permanently affected, inasmuch as the money value of the cultivator's product cannot be either raised or depressed without a corresponding and contemporaneous elevation or depression of the money value of his outgoings.

CHAPTER V.

Fall of natural profits farther considered—no transference of capital from agriculture to other departments can permanently raise agricultural profits while the least productive land continues to be cultivated, but such transference will reduce profits in other departments to the level of natural profits.

An increase of population, an augmented supply of labour, which has been shown to be the cause of inferior land being brought under cultivation, will *temporarily* elevate profits, not only in agriculture, but in *every department of production.* But when the rate of the manufacturer's profits is above 60 per cent., and the profits of agriculture are at the same time sinking to 50 per cent., will not capital, it may be asked, be withdrawn from agriculture and embarked in the other more profitable employments? The answer to this is—Suppose capital to *be* so transferred, and observe what the immediate consequence will be. Keep in mind that the *original cause of the change* was an increase of population, *an addition to the supply of labour*, which has sunk its price, and *temporarily* elevated profits. This *temporary* elevation of profits has necessarily caused a re-adjustment of money (be the supply from the mines great or small) to the enlarged supplies of corn and labour.

Now, if in these circumstances capital be withdrawn *from agriculture*, and transferred to manufactures, mining, or any other department, the immediate consequence must be a diminished supply of corn and a rise of its money price. But if this high price be *continued*, we have already seen what the consequence will be:—the *continued* high price of food will continue to deprive the labourer of a part of his subsistence, to diminish his comforts, to hinder him from marrying and adding to the numbers of the people, while the existing population is dying out and disappearing at the usual rate,—in short, to check population, to abridge the supply of labour, till by the operation of this cause, the price of labour shall so rise as to reduce profits to the new natural rate of 50 per cent.

If the principles on which we have based the argument be sound, or rather if the *facts* on which that argument rests be admitted, the supply of corn cannot be permanently limited without checking population, and limiting the supply of labour, and therefore the price of corn cannot be permanently elevated without elevating the price of labour to a corresponding extent, that is, without restoring the former ratio of population to food, of labour to corn, and bringing back profits to their natural rate.

CHAPTER VI.

In a country dependent on its own agricultural resources, nothing but depopulation arising from extrinsic causes will throw the least productive land which has been cultivated, out of cultivation.

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BUT let us, it may be said, extend the hypothesis still farther—let us suppose the capital withdrawn from agriculture to be perseveringly withheld—let us suppose the cruel experiment to be tried and persisted in, of limiting the supply of food until all that part of the population which is maintained upon the produce of land No. 2 is again swept away, and population brought back to its original limit—and it is asked whether, in such circumstances, agricultural profits will not again rise permanently to 60 per cent.?

Now, the best mode of disposing of this

question is to show the case supposed to be *impossible.* War, bad government, or other *external* causes may certainly diminish or check population, and throw inferior land out of cultivation (and this is probably the case of Spain and other countries at this moment); but *an arbitrary limitation of supply, for the purpose of enhancing prices and profits, never can.* This is demonstrable. For the circulation having been adjusted to the enlarged supply of labour and food, you cannot limit to a considerable extent the supply of corn, without instantly causing a great and feverish rise in the money price of that commodity. Corn differs from all other commodities in this respect, that every man must have his daily share of it, though at the expense of every other enjoyment. *All that a man hath will he give for his life*—for his food. The price of corn, therefore, in the circumstances supposed, will rise instantly and greatly, and the *temporary profits* of the farmer will rise in the same proportion, and for a time much exceed the rate of profits in any other department; the capital just withdrawn will be *instantly attracted back*, and the supply of corn will be again enlarged to its former magnitude. *But the moment this happens*, the supply is again equal, and no more than equal, to the demand —the proportion between the food raised on No. 2 and the population, as recently increased, is restored; the former ratio of the whole food to the whole population is restored; the former ratio of both corn and labour to money is restored; and the natural rate of profits again settles at 50 per cent. This must ever be the result. After population has advanced, you must go on, YOU CANNOT GO BACK, and therefore it is unnecessary to speculate farther on the effects of such a retrograde movement.

The following is a summary of the propositions which we have attempted to establish, viz.:—

First, That when all the most productive land (No. 1) is fully cultivated, a recourse to the soil next in fertility (No. 2) is inevitable, owing to the temporary elevation of profits caused by the reduced value of the labour of an augmented population.

Second, That when recourse has once been had to the inferior land (No. 2), every attempt to throw that land again out of cultivation must be rendered nugatory by the rise of the price of corn attracting back any portion of capital that has been withdrawn from agriculture.

Third, That two unequal rates of profit cannot continue to co-exist at the same time and place.

Fourth, That the profits of agriculture cannot be more or less than equal to the surplus produce of the least productive land under cultivation, or the surplus return from the least productive portion of capital applied to land.

Fifth, That common or average profits in all other departments of trade and industry are regulated by the profits of agriculture.

CHAPTER VII.

Principles which regulate the natural rate of Profits in a country wholly dependent for the subsistence of its population on imported corn, and in a country dependent partly on home and partly on foreign supplies of food.

THE conclusions at which we have arrived with respect to profits will hold, though we suppose the labour of a country to be maintained, not on corn grown at home, but exclusively on corn imported from abroad.

The foundation of all commerce is barter, and foreign trade is nothing else than an exchange of commodities. Where a country has no corn of its own, therefore, the requisite supplies can be obtained only by exchanging the products of its labour for the products of the land and labour of a corn-growing country. Suppose that an inhabitant of a country so situated, possessed of a capital equal, as in the former case, to 100 quarters of wheat (for although the country, by the supposition, produces no corn, a certain amount of food, however obtained, must be provided *before* industry can be set to work), employs that capital in maintaining labourers in the working up of commodities for foreign markets, in transporting these commodities, exchanging them for foreign corn, and in bringing that corn home; that the return from the capital so employed is 140 quarters of wheat; that every one who chooses to employ a similar capital in the same trade may have the same return; and that no one can obtain a greater return. Profits in this department of trade will, in these circumstances, be 40 per cent.; and this will be the natural and regulating rate of profits. For it has been already shown that no other producer employing the same capital of 100 quarters in any other department of trade, would, under such circumstances, exchange *his* product for *less* than 140 quarters; and as, according to the principles formerly explained, no transference of capital to or from agriculture (in a corn-producing country) can permanently elevate or depress profits in that department, so neither, where the whole supply of corn is procured through the medium of foreign trade, will any transference of capital to or from that department permanently raise or lower the rate of profits. That rate is self-regulated, *because* population, or the supply of labour, accommodates itself to the supply of corn, and corn will equally create a market for itself, and regulate the quantity, and through the quantity the price, of labour, whether that corn is purchased with the products of manufactures, or is produced directly by agricultural labour.

When the population of a corn-importing country is as great as can be maintained upon such supplies as can be procured from the nearest and most abundant foreign markets, recourse must be had to other markets, less accessible, or more scantily supplied. The labour necessary to procure corn from such markets will, of course, be greater in proportion to the return. If the return from the more distant market be only 130 quarters for every

100 quarters employed, the amount of exports to the nearer and better supplied market will be increased, although this increase of supply in *that* market be attended with a diminution of their value. If after such increase the exporter can procure 135 quarters from the nearest market, he will rather send his goods thither than send them to the more distant market with a return of only 130 quarters, and he will send more and more goods to the nearest market, till the increased supply lower the value of such goods in relation to corn. This increase of exports will go on, till the goods produced by a capital of 100 quarters will exchange in the nearer market for no more than 130 quarters, at which point the increase will stop, for it then becomes a matter of indifference to the exporter from which of the two markets he procures his supply.

Natural profits will now be reduced to 30 per cent.; and the amount of the circulation, and the supply of all commodities, will be adjusted in the way already pointed out. After the increase of population has forced a recourse to the more distant and dearer market, we can no more fall back on the nearer and cheaper market, as the *exclusive* source of supply, than, in the case of a gradation of soils, we can fall back on No. 1 after having had recourse to No. 2. A certain supply of corn is wanted for the augmented numbers of the people, and if this supply cannot be obtained at the rate of 140 quarters for every 100 quarters employed, profits must fall below 40 per cent. The country which affords the nearest market will benefit by this, inasmuch as it will thereby obtain an increased quantity of the goods of the corn-importing country in exchange for the former quantity of corn, but profits will always be regulated by the return obtained *under the most disadvantageous circumstances.* If the reasoning of the preceding chapters be correct, therefore, the regulating principle of profits is the same, whether a country grows or imports its corn.

But another case remains to be examined, and a more difficult question to be solved.—Suppose the labour of a country to be maintained, partly on home-grown, and partly on imported, corn; and suppose the cultivation of such a country to have reached the land No. 4, or land which, with an outlay of 100 quarters, yields a return of 130 quarters; that the importation of foreign corn has hitherto been effectually prohibited; but that there are foreign markets at no great distance, whence, with the same capital of 100 quarters, a return as great as from the land No. 3, or 140 quarters, can be obtained; and that at length all legal restraints are removed, and a free importation of foreign corn is allowed.

This would be exactly the same thing in effect as if a more fertile and productive tract of land (land equal to No. 3) were discovered, *after* the inferior soil No. 4 had been entered upon. The effect of such a discovery might be to throw No. 4 out of cultivation, and raise profits from 30 to 40 per cent. The same effect would follow from any improvement in agriculture which should have the effect of increasing the produce of land without a corresponding increase of the capital and labour employed in raising that produce. On the same principle, if by procuring our supplies from abroad we obtain a greater proportionate return, natural

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profits will be raised. No man, for example, will devote 100 quarters to the cultivation of land No. 4, with a return of 130 quarters, when, by employing the same capital in working up exports, he can procure 140 quarters from another country. The land No. 4 in that case would be thrown out of cultivation, and as much corn would be imported as was required for the subsistence of the population formerly maintained on No. 4; but, until population increased, the importation of corn would not exceed this, for it would still be a matter of indifference to the capitalist whether he employed a capital of 100 quarters in cultivating No. 3, or in working up commodities to be exported in exchange for foreign corn. The former demand would be met and satisfied; but importation would not go beyond this without an increase of population, for at this point the former ratio of corn, both to labour and money, would be restored.

Whether the importation of foreign corn will throw part of the land of a country out of cultivation, must always depend upon the *fact*, whether a greater proportionate return in corn can be obtained from a given capital employed in domestic agriculture, or in the production of commodities for the purchase of foreign corn. Whether the land No. 4, in the case supposed, would or would not be brought again under cultivation, would depend on whether sufficient foreign supplies could or could not be obtained, on more advantageous terms, to meet the wants of the advancing population. If it became necessary to have recourse to more distant markets, yielding a return of only 130 quarters, then the land No. 4 would be again brought into cultivation; but however this might be, the natural rate of profits would be regulated by the return obtained under the most disadvantageous circumstances.

Nor would the value of *labour*, whether estimated in corn or in money, be diminished in consequence of the free importation of foreign corn; for that the supply of labour will always keep on a level with the supply of food, come from what quarter it will, is as certain as any law in physics. Wages cannot be reduced without a permanent alteration of the ratio of population to food; in other words, without an alteration in the labourer's mode of living, which a mere change in the direction of industry cannot of itself produce.

CHAPTER VIII.

Soils inferior to the least productive corn land under cultivation may, and generally do, yield a rent —Laws by which the rent of land under wood or natural pasture is governed.

HITHERTO we have considered land as capable (with the requisite application of capital) of producing only corn, or whatever else constitutes the food of the great body of the people; and we have seen that, were corn the only product, the rate of profits would be exactly equal to the difference between the produce obtained from the least productive land and the capital employed in raising that produce. But land, in its natural state and without cultivation, is also capable of producing grass for the food of cattle, copsewood, and other products possessed of exchangeable value. Hence it is not always true that the least productive corn land yields no rent.

To prove this, let us assume that the agriculture of the supposed country has reached the land distinguished as No. 4, the return being 130 quarters for every 100 quarters employed; and let us farther suppose, that there is much of the remaining land which is incapable of cultivation,—a tract of moor land, or rough pasture, like some parts of the Highlands of Scotland. Whether such land would or would not yield a rent, must depend on whether the return in sheep, cattle, wood, or other produce, after replacing the capital employed, exceeds or falls short of 30 per cent.

Suppose that a person possessed of a capital equal to 100 quarters of corn, or L.100, instead of applying that capital to the cultivation of the least productive corn land (No. 4), with a return equal to 130 quarters of corn, or L.130, shall employ his 100 quarters, or L.100, in purchasing, tending, and bringing to market 100 sheep; if the annual produce and increase of his flock, over and above his necessary outgoings, shall amount only to 20 per cent. on his capital, of course he will find the rearing of sheep unprofitable, and give up the trade. He can in that case pay no rent, for his return is not equal to even the ordinary profits; he will, therefore, rather devote his capital to the raising of corn, with a return of 30 per cent.

Again, if the produce and increase of his flock, over and above his necessary outgoings, shall amount to 30 per cent. on the capital employed, he may continue the trade, because in that case he obtains the ordinary or average profits.

But if the increase on his flock, over and above his necessary outgoings, shall amount to 40 per cent. on the capital employed, then the land to which we allude will yield a rent equal to 10 per cent. on that capital. Whether this shall be the rent of 10, or 100, or 1000 acres of land, depends entirely on how much land is required to feed 100 sheep; the greater the extent of land, the less will be the rent of each acre; it may be one pound, it may be one shilling *an acre;* still every acre and every part of every acre will yield *a rent.*

Nor does the question of rent or no rent depend on the value of the capital employed; for if a capital of L.100, employed on 10,000 acres of land, yields a clear return of L.140 when profits are at 30 per cent., the surplus L.10 clearly constitutes rent. Rent depends on the ratio of the product to the capital employed, and if that product, or its value, exceed the capital, or its value, by more than the ordinary rate of profits, a rent, greater or less in amount, according to the value of the capital and the extent of surface over which that capital is spread, will be yielded by every inch of the soil capable of giving nourishment to a blade of grass.

Again, suppose a tract of country to be under copsewood. Such wood is usually cut down once in twenty years, and the proprietor of such land generally divides it into twenty portions, and cuts down one portion every year, in order that he may obtain a nearly uniform annual return. Now suppose the proprietor to expend annually a capital equal to 100 quarters of corn or L.100 on preserving his woods and cutting down and bringing to market one of the portions referred to, and that his return from the copsewood, when sold or exchanged, is 140 quarters or L.140, while profits are at 30 per cent. as before. In this case the whole tract of country under copsewood will yield *a rent*, a rent greater or less *for each acre* according as a greater or less extent of ground is covered by the wood in question, but still *a rent* applicable to *every inch* of the supposed territory; for it would obviously not alter the conclusion at which we have arrived although we were to suppose the whole wood to be cut down at the end of twenty years, instead of a twentieth part annually. In that case the rent would be *vicennial*, instead of *annual*, but a twentieth part of this vicennial return would truly constitute the annual rent of the whole land.

CHAPTER IX.

Interest of money—natural and market rate—value of land.

BOOK IV. THE principles which we have attempted to elucidate in this and the immediately preceding Book afford an easy and obvious explanation of the laws which govern the interest of money, and the value of land.

It is necessary here to distinguish between *gross* and *net* profits. Gross profits comprehend compensation for the risk, personal exertion, skill, or peculiar advantages of the capitalist, while *net* profit is the clear surplus which remains after deducting that compensation.

The owner of capital is very often deterred from employing it himself in trade, and lends it to another who possesses the requisite knowledge and skill, or enjoys peculiar advantages of locality or connexion, and, above all, who is willing to encounter the risk, as well as the personal trouble, which attend commercial undertakings. Hence gross profits come most frequently to be divided between two parties—the owner and the active employer of capital. Adam Smith has remarked, that "The lowest ordinary rate of profit must always be something more than what is sufficient to compensate the occasional losses to which every employment of stock is exposed. It is this surplus only which is neat or clear profit. What is called gross profit comprehends frequently, not only this surplus, but what is retained for compensating such extraordinary losses. *The interest* which the borrower can afford to pay is in proportion to the clear profit only."*

Interest and the net profit of capital are in truth *identical*, and when gross profits are high or low, the interest of money, or net profit, will also be high or low. "It may be laid down as a maxim," says Adam Smith, "that wherever a great deal can be made by the use of money, a great deal will commonly be given for the use of it; and that wherever little can be made by it, less will commonly be given for it."*

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* Wealth of Nations, b. i. ch. 9.

Such would appear to be the law which regulates the natural and ordinary rate of interest. But the market and actual rate is sometimes higher and sometimes lower than the natural and ordinary rate.† The supply of disposable capital and the demand for it are influenced by a great variety of circumstances. The state of trade and general prices causes money sometimes to flow into a country and sometimes to flow out of it. The supply of money fluctuates like the supply of everything else; and the demand for money is not always equally intense. War, public loans, an unusual prevalence of the spirit of speculation, and other circumstances, frequently create a sudden and urgent demand for money. When the demand exceeds the supply, the market rate of interest rises for a time above the natural rate; when the supply exceeds the demand, the market rate falls for a time below the natural rate; but the natural and ordinary rate of interest, dependent upon and regulated by the natural rate of profits, is the centre towards which the market and actual rate constantly tends.*

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* Wealth of Nations, b. i. ch. 9.

† A certain amount of risk almost always attends the lending out of money at interest, and when this risk is greater than usual, the rate of interest invariably exceeds the ordinary rate; but the excess is not so much a return for the capital as a compensation for the risk—it resolves itself into a premium of insurance, which is added to net profit when the employer of the capital is of doubtful credit, and is thus destitute of one essential qualification for the trust which he undertakes. The length of the term, and convertibility of the security, also affect the rate of interest in particular instances.

The rate of interest regulates the value of land. To buy *land* is in reality to purchase a perpetual right to receive the *rent* of land, or that part of the gross produce which remains

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* The subject of interest is nowhere more ably handled than in the Fourth of *Hume's Political Discourses*,—a work to which (as well as to Hume's Ethical and Metaphysical writings) Adam Smith was indebted, and which merits the unqualified praise bestowed upon it by Lord Brougham in his recent life of the historian. Hume was the first to detect the error which Locke and Montesquieu committed in representing the rate of interest as governed by the amount of the circulating medium. "The lowness of interest is generally ascribed to the plenty of money. But money, however plentiful, has no other effect, *if fixed*, than to raise the price of labour. Silver is more common than gold; and therefore you receive a greater quantity of it for the same commodities: But do you pay less interest for it? Interest in Batavia and Jamaica is at 10 per cent., in Portugal at 6; though these places, as we may learn from the prices of everything, abound much more in gold and silver than either London or Amsterdam. Were

all the gold in England annihilated at once, and one-and-twenty shillings substituted in the place of every guinea, would money be more plentiful, or interest lower? No, surely: We should only use silver instead of gold. Were gold rendered as common as silver, and silver as common as copper, would money be more plentiful or interest lower? We may assuredly give the same answer. Our shillings would then be yellow and our halfpence white; and we should have no guineas. No other difference would ever be observed. No alteration on commerce, manufactures, navigation, or interest; unless we imagine that the colour of the metal is of consequence. Now, what is so visible in these greater variations of scarcity and abundance of the precious metals, must hold in all inferior changes. If the multiplying gold and silver fifteen times makes no difference, much less can the doubling or tripling them. All augmentation has no other effect than to heighten the price of labour and commodities; and even this variation is little more than that of a name. *In the progress towards these changes*, the augmentation may have some influence by exciting industry; but *after the prices are settled*, suitable to the new abundance of gold and silver, it has no manner of influence."—*Hume's Political Discourses*, edition 1752, p. 61.

Temporary variations of the market rate of interest certainly do occur during the progress of every alteration in the amount of the currency, interest being lower when the currency is on the increase, and higher when it is in process of contraction. Mr Tooke has given a lucid explanation of this, and of the causes generally which elevate and depress the after replacing the capital of the cultivator, including profits—it is in truth to purchase a *perpetual annuity.* The value of land, therefore, will rise at every step in the descent of cultivation, because, as gross profits go on diminishing, net profits must also go on diminishing, and the value of every fixed annuity, whatever name we give it, is less or greater according as the ordinary rate of interest is greater or less. Thus, let the rate of interest, or net profit, be 3 per cent. per annum, the value of land will be 33⅓ years purchase, for a capital 33⅓ times greater than the rent annually received from the land will, if invested in any other department, yield at 3

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market rate of interest, in his very able work entitled *Considerations on the State of the Currency*, 2d edition, section 1. See in particular note p. 23.

The falling or rising market rate of interest which accompanies an increasing or diminishing *metallic* currency would seem to be purely an *effect;* but when the currency consists partly of gold and partly of convertible paper, the temporary elevation or depression of the rate of interest is often made the instrument of regulating the issue of paper. Thus, what under other circumstances was an effect, is converted into a *cause;* just as a higher or lower price of commodities, which under ordinary circumstances is the effect of scarcity or abundance, may be made the instrument of adjusting supply to consumption. See *ante*, Book I.

per cent., an annual return equal to that rent. Again, if the rate of interest be 4 per cent. the value of land will fall to 25 years purchase —or if 5 per cent. to 20 years purchase—in short, when interest rises, the value of land, or rather the value of the *rent* of land, falls, and *vice versa;* for in all cases where the annual return is *fixed*, and cannot accommodate itself to the elevation or depression of net profit, the *value* of the return must rise or fall until the ratio between the value and the return shall correspond with the ratio which obtains generally in other departments.*

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* "The ordinary market price of land, it is to be observed, depends everywhere upon the ordinary market rate of interest. The person who has a capital from which he wishes to derive a revenue, without taking the trouble to employ it himself, deliberates whether he should buy land with it, or lend it out at interest. The superior security of land, together with some other advantages which almost everywhere attend upon this species of property, will generally dispose him to content himself with a smaller revenue from land than what he might have by lending out his money at interest. These advantages are sufficient to compensate a certain difference of revenue; but they will compensate a certain difference only; and if the rent of land should fall short of the interest of money by a greater difference, nobody would buy land, which would soon reduce its ordinary price. On the contrary, if the ad-

vantages should much more than compensate the difference, everybody would buy land, which again would soon raise its ordinary price. When interest was at ten per cent. land was commonly sold for ten or twelve years purchase. As interest sank to six, five, and four per cent., the price of land rose to twenty, five-and-twenty, and thirty years purchase. The market rate of interest is higher in France than in England, and the common price of land is lower. In England it commonly sells at thirty, in France at twenty years purchase." —*Wealth of Nations*, book ii. chap. iv.

BOOK V.

OF FOREIGN TRADE.

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CHAPTER I.

The foundation of all commerce is barter—Foreign trade regards money simply as a commodity—Theory of exchange—When the course of exchange becomes adverse to a country by reason of an inequality of debts and credits, arising in the natural course of trade, the deviation of the exchange from par is corrected by increased exportation from the debtor to the creditor country.

FOR the sake of perspicuity, we have hitherto made no reference to *foreign trade.* The argument has had reference solely to the supposed case of a country having a domestic agriculture sufficient to maintain with comfort its entire population; employing that population exclusively in the several departments of native industry and home production; and possessed of mines of its own, from which are procured the materials requisite for a metallic currency.

But no country is in fact thus isolated. And it is necessary that we should now inquire whether, and how far, the conclusions at which we have arrived are liable to be changed or modified by the operations of *international* commerce,—whether the theory of profits and prices which we have ventured to propose, will hold good when the supposed country comes to be regarded, not as a separate and independent state, but merely as one province of the mercantile world.

In pursuing this inquiry, it must be constantly borne in mind, that all trade, whether foreign or domestic, is in reality nothing else than the exchange of one commodity for another. This exchange may be effected either by direct *barter*, or through the intervention of *money;* but foreign trade regards money simply as *a commodity possessed of exchangeable value*—

an *equivalent*, to be used as occasion serves, for effecting exchanges. "An exchange of equivalents," says Mr Huskisson, "is the foundation of all commerce, from the simple barter of the untutored Indian, to the most complicated and extensive operations of the London merchant."*

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* Question concerning the Depreciation of the Currency—Speeches of the Right Honourable William Huskisson, vol. i. p. 100.

I cannot forbear adding here the following luminous exposition of the advantages of foreign trade from the same admirable tract:—"It may, perhaps, be asked, if commerce is nothing more than an exchange of *equivalents*, and the balance of trade, taken for any length of time, only the measure of our foreign expenditure, in what way is a country enriched by trade? To those who may be disposed to ask this question, I would, in the first place, reply by putting one or two others. What is the *internal* trade of any country, that is, the trade carried on between different districts of the same state within the limits of its territory, but an exchange of *equivalents*? Is this a trade by which the one gains and the other loses?—by which Yorkshire is enriched at the expense of Kent? Then, if our internal trade be an exchange of *equivalents*, what is the distinction, in this respect, between it and foreign trade? What takes away this character from the latter?—And what, after all, is the latter? To the question—how, then, are we enriched by trade?—the answer appears to me as obvious as it is consistent with this doctrine. The mind and faculties of man are constantly engaged in pursuit of his own happiness, and in multiplying

Now, keeping this consideration in view, let us suppose that when the natural rate of profits

the means of subsistence, comfort, and enjoyment. Trade, which effects the exchange of a part of the productions of the soil, industry, and talent of any one country, against those of the soil, industry, and talent of all other countries, is the great instrument of multiplying these means. By the aid of this exchange, not only those natural productions, which Providence has distributed in abundance in one portion of the globe, and refused to some other, are rendered common to all; but the soil of every country, and of every portion of every country, is left at liberty to be cultivated principally, or wholly if necessary, in raising those productions for which it is best calculated and adapted; those which by experience it has been found to afford of the best quality, in the greatest abundance, and at the least expense of capital and labour. Labour or capital, employed in manufactures, is enabled to avail itself of local situations and natural advantages (for instance, a stream or a coal-mine), and to adapt itself, exclusively to those pursuits, in which, from any peculiar disposition, dexterity, ingenuity, or fortuitous discovery, the people of any particular country, or any particular part of them, may excel. The advantage derived from the division of labour is well known. What is effected by the operation of that principle for a single undertaking is, by the aid of commerce, effected for the whole world. Commerce enables the population of each separate district to make the most of its own peculiar advantages, whether derived from nature or acquired by the application of industry, talent, and capital; to make the most of them for its own consumption; leaving at the same time the greatest possible remainder to be given in exchange for any other commodities produced more easily, is 15 per cent., a person possessed of a capital equal to 100 quarters of wheat, or 100 ounces of gold, instead of employing that capital in *any* department of domestic industry, shall send it abroad, and employ it in importing a part of the products of another country. The products so obtained he will certainly not exchange for *less* than 115 quarters of wheat, or 115 ounces of gold, because, by employing his capital at home, he could, by supposition, have obtained a return of 15 per cent.* On the other hand, no one will give *more* in exchange for the products referred to than 115 quarters of wheat, or 115 ounces of gold, because any one possessed of the same capital can, by employing it in foreign trade, obtain the same amount of foreign products. If the adventurer in foreign trade obtained *more* than 15 per cent., other adventurers would enter that trade, increase the supply, and undersell him. If, on the other hand,

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more abundantly, or of better quality, in other districts of the world. It is *thus* that a country is enriched by commerce."—*Speeches*, &c. vol. i. pp. 102, 103.

* In comparing the per centage profits of foreign trade with those of the home trade, we of course assume that the returns are received within the same time.

he obtained less than 15 per cent., capital would be withdrawn from that department, until the diminution of the quantity imported should so raise the price as to produce the natural rate of profits.

Taking, then, this elementary and simple view of foreign trade, it appears that international commerce does not alter or modify our conclusion regarding profits.

1. Nor would it make any difference although the supposed capitalist, instead of sending abroad 100 quarters of wheat, or 100 ounces of gold, to be *directly* exchanged for foreign commodities, were to employ the same capital at home in working up another exportable commodity (for example cotton cloth), and in sending abroad the commodity so manufactured to be exchanged for foreign products. In that case, the cloth, instead of being sold in the home market, with a profit of 15 per cent., would be sent abroad, and exchanged for a foreign commodity, which would afterwards be sold at home with a profit of 15 per cent.

2. Neither would it make any substantial difference although the cotton cloth were to be

first of all exchanged abroad for foreign money, and that money again exchanged for the foreign commodity, and, lastly, the foreign product, on its being imported, exchanged for British money. The commodity exported having cost 100 ounces of gold, the imported commodity would not be exchanged for less than 115 ounces.

3. Nor would the real nature and effect of the transaction be altered by the high or low cost of production abroad. If this were relatively high, a determinate quantity of British goods would exchange for a smaller quantity of foreign goods—if low, for a greater quantity—but that quantity, whether great or small, would still be exchanged in our market for the same sum of British money. If the cotton cloth for example, were sent to Portugal, and exchanged in the first case for three pipes of wine, these three pipes would be sold here for a sum equal to 115 ounces of gold; but if, through a reduction in the cost of producing wine in Portugal, the cotton cloth were exchanged for four pipes of wine, these four pipes would still be exchanged here for a sum equal to 115 ounces. Wine after the change would be cheaper than

before that change; but profits here would still be at 15 per cent.

4. The transaction would still be in substance the same, though the cloth were paid for, not in Portuguese, but in British money, and the wine, not in British, but in Portuguese money—that is to say, although the transaction were adjusted by means of a *bill of exchange.* A of London exports cloth to B of Oporto, while C of Oporto exports wine to D of London—the value of the cloth is equal to 115 ounces of gold, and the value of the wine is the same. A of London draws a bill for the 115 ounces of gold (or its amount in Portuguese money) upon B of Oporto. This bill he sells for an equivalent amount of British money (computed according to the market rate of exchange) *to* D of London, by whom it is remitted to Oporto in discharge of his debt to C, who receives payment from B. The price of the cloth is thus paid in London, and the price of the wine in Oporto, and *without the transmission of money.* The transaction is thus seen to be nothing else than an exchange of commodities. B was debtor to A, while D was debtor to C. By

means of a bill of exchange, the parties are made to change places. D of London is made debtor to A of London, and B of Oporto debtor to C of Oporto—the cloth is paid for in British money, and the wine in Portuguese money—and there is no transmission of specie from the one country to the other.

But it is evident that this method of squaring accounts, by means of bills of exchange, can be adopted only where the debts and credits between two countries are exactly equal. If London, for example, owe New York a debt equivalent to 10,000 ounces of gold, while New York owes London a debt equivalent to only 9000 ounces, it is plain that these debts cannot be cancelled by bills of exchange, without a farther exportation of commodities or specie from London to New York, to the amount of 1000 ounces. If in London bills on New York are offered for sale to the amount of only 9000 ounces, while there is a demand for such bills to the extent of 10,000—if the supply fall short of the demand, the price of such bills will *rise*—bills on New York will bear a *premium* in London. A determinate sum of American money will sell for *more* than a corresponding sum of British money; or, which is the same thing, a determinate sum of British money will purchase *less* than a corresponding sum of American money; and the course of exchange will be said to be *against London*, or *in favour of New York.* Or again, if, in New York, bills on London are offered for sale, to the amount of 10,000 ounces, while the demand does not extend beyond 9000 ounces, such bills will *fall* in price, or be at a *discount.* A determinate sum of British money will sell for *less* than a corresponding sum of American money; or, which is the same thing, a determinate sum of American money will buy *more* than a corresponding sum of British money; and the course of exchange will still be said to be *against London*, and in *favour of New York.* The premium in London will be equal to the discount at New York.

But although the natural course of traffic affords in the London market a supply of bills on New York only to the extent of 9000 ounces, bills to the entire amount of 10,000 ounces will be sold, in order to take advantage of the premium, and commodities or specie to the amount of 1000 ounces of gold will be sent from London to New York, for the express purpose of *creating a fund* to meet these additional drafts.

Whether the fund thus created at New York, for the London bill-seller to *draw against*, shall consist of bullion or consumable commodities, will depend solely on the consideration of which is the *more profitable remittance.*

On the one hand, if bullion or specie be sent to New York, for coinage into American money, the bill-seller can expect *no profit except* the premium on his bill, and from this premium must be deducted the expense of transit, including insurance, &c. Gold, as we have already shown, is a fixed standard, and cannot rise or fall in value in respect of itself; but a *warrant to receive* a determinate quantity of gold *at New York* may be of greater value in the British market than an exactly corresponding quantity of gold *in London, by the whole expense of transmitting gold from the one place to the other*, including compensation for risk and loss of interest. *It cannot be more*—for if the expense of transmitting 1000 ounces of gold from London to New York be 2 per cent., rather than pay more than 1020 ounces for a warrant to receive 1000 ounces in America, the London merchant will send thither the quantity of gold required.

While the currencies of two countries, therefore, are perfect, that is, are of standard weight and fineness, according to the mint regulations of each, the exchange cannot deviate from *par* or *equality* by a greater sum than is required to defray the expense of transmitting specie from the one country to the other. Hence, if the premium, in the case above supposed, were equal to this expense, gold might be transmitted from London to New York to the extent of 1000 ounces—I say *might* be transmitted, because bullion will not be the remittance which the merchant will select, if consumable commodities of British produce can be sold with a profit in the American market, for in that case the seller of a bill in London will obtain, not the *premium* on his bill *only*, but a *profit* on the commodities which he exports.

The double inducement thus held out by

an adverse exchange necessarily *forces the exportation* of commodities from the country to which it is adverse, and *restricts the importation* of commodities from the country to which it is favourable—it is a *bounty* upon the one, and a *tax* upon the other. At London, in the case supposed, it would be a bounty on the exportation of commodities to New York, by adding to the London merchant's profits the premium on the bill which he draws on his American correspondent. At New York it would be a tax on the exportation of commodities to London, because the discount on the bill would diminish by so much the profits of the exporter.

The foreign exchanges, therefore, have a power of *self-regulation.* When a country imports to a greater amount than it exports, its debits exceed its credits, and the exchange becomes unfavourable; but *the moment it is so,* the adverse exchange forces exports and restricts imports, till debts and credits are again equalized, and the exchange is restored to par. Increase the exports from London to New York, and you increase the supply of bills on New York in the London market, and their price will *fall*. Diminish the exports from New York to London, and you abridge the supply of bills on London in the New York market, and their price will rise. Both causes operate at the same time, and in the same direction.

But if additional British goods cannot be sold in the American market without loss, or rather without such a profit as will compensate the cost and risk of transmission, such goods will not be exported, and the exchange will consequently become more and more unfavourable to London till the premium on bills be sufficient to meet the expense of transmitting specie. When it reaches that point, specie will pass, and the exchange will regain its par—the expense of transmitting specie being the natural limit to the rise or fall of the exchange from an excess of imports or exports.

The tendency of the exchange, therefore, in so far as its deviations from par are caused by an excess of debts or credits, or the relative abundance or scarcity of bills in the market, is always to regain that par; but whether the exchange be at par, or above or below par, foreign trade is seen to be nothing else than the exchange of one commodity for another.

CHAPTER II.

Theory of exchange continued—The par of exchange is the equality of currencies—The real differs from the nominal par (1.) *when the currency of either country is deficient in weight or fineness;* (2.) *when either country has a wrong adjusted double standard of money; and* (3.) *when an over issue of paper money is allowed.—Such disorders of the exchange cannot be corrected but by rectifying the disordered currency.*

BOOK V.

We have already more than once made use of the expression PAR OF EXCHANGE; but, to prevent misapprehension, it is necessary to *define* that term. The exchange between two places is said to be *at par*, when a given sum of the currency of the one place will purchase *a warrant* (called a bill of exchange), entitling the holder to receive, in the other place, a sum of foreign money of exactly the same intrinsic value, that is, *containing exactly the same weight of pure gold or fine silver.*

Hence it follows, that between two countries, the one employing gold, and the other employing silver, as the standard of its money, there cannot be a real, but only an approximate, par of exchange; for the relative value of the two metals is subject to constant fluctuation, and a determinate quantity of the one will, at different times, exchange for, or be worth, different quantities of the other.

When the term *par*, therefore, is used, it must always be understood to mean *the equality of two currencies composed of the same metal.*

Gold is the standard of the currencies of Great Britain and the United States. In the latter country, the money unit is the dollar of 100 cents, and the American gold eagle, containing as much pure metal as L.2, 1s. 1d. worth of our gold coin, is by law a tender for 10 dollars, making the value of the dollar of account 4s. 1¼d. sterling, or 4 dollars 87 cents equal L.1 sterling, and, of course, 487 dollars equal L.100 sterling, which are all different expressions for the *par* between Great Britain and the United States.

Assuming now that the imports and exports, or rather the debts and credits, of the two countries are exactly equal, and, consequently, that no disturbing effects are produced on the price of bills by the supply exceeding or falling short of the demand, let us inquire what effects will be produced; 1*st*, By altering the weight or fineness of the coin of either of the two countries; 2*d*, By enlarging the total circulation of either, by the relative over-issue of paper-money; and, 3*d*, By allowing two metals to form the standard.

1*st*, The weight and fineness of the coin may be altered by law, by illicit practices, or by natural tear and wear. Now the par of exchange being, as already stated,

L.100 equal $487,

suppose that *our* mint regulations are changed, and that an ounce of standard gold is ordered to be coined, not as at present into $3\frac{143}{160}$ sovereigns or L.3, 17s. $10\frac{1}{2}$d., but into one-tenth more, namely, $4\frac{46}{160}$ sovereigns, or L.4, 5s. 8d.; or suppose our gold coins to be so worn or degraded that $4\frac{45}{160}$ sovereigns will weigh no more than one ounce troy, then the price of standard gold bullion will rise to L.4, 5s. 8d. an ounce. The *real par* of exchange will now be

L.110 equal $487;

and the reason is obvious, for it will now take 110 sovereigns instead of 100 as before to make up metal equal to that contained in $48\frac{7}{10}$ eagles.

Before the change the par was

L.100 equal $487.

After the change the par is

L.110 equal $487.

Or take the converse of this case, and suppose the sovereign or coin representing one pound-sterling to be still of its former weight and fineness, but the eagle to be worn or degraded to the extent of one-tenth, while it is still preserved as legal tender for 10 dollars, the *real par* of exchange will now be

L.100 equal $535;

and the reason is the same, for it will now take $53\frac{6}{10}$ eagles, instead of $48\frac{7}{10}$ as before, to make up metal equivalent to that contained in 100 sovereigns.

Before this last change the par was

L.100 equal $487.

After the change the par is

L.100 equal $535.

In both cases, the *nominal* par may still be stated as L.100 for 487 dollars, while in the *first* case it may be said that the exchange is 10 per cent. *against London*, and in favour of New York, and in the *second* case, 10 per cent. *against New York* and in favour of London; but this is merely to substitute *words* for *reasons*, *names* for *things*. The *true par is the equality of currencies*, and if the money unit be altered, no amount of importation or exportation, no alteration of debts and credits, no expansion or contraction of the supply of bills, or of the demand for them, however much, *for a time*, such changes may influence the *computed* exchange (or rate *actually quoted*), can permanently alter the *real par*. The market price of bills will still vary and gravitate as before towards a centre; but the centre towards which that price gravitates is now changed—the *real*, not the *nominal* par is that centre.

After the alteration of the par the oscillation of prices will be limited, as before, by the expense of transmitting specie, but that expense will not be a measure of the divergence of the real from the nominal par.

2d, Let us see the effect of an enlargement or contraction of the whole currency, or the total amount of money actually in circulation in either country.

The currency of a country may be enlarged in two ways; and let us *first* suppose it enlarged by the government issuing, or permitting to be issued, what has been called *paper-money*, or notes *promising* to pay a determinate sum of money to the bearer on demand, but not actually convertible into metallic money at the option of the holder. There being no rule by which the issue of paper-money may be regulated or controlled, and the profits of the issuer depending on the quantity which he sends into circulation, such paper, in every country of the world where it has been allowed, always has been, and probably always will be, issued *in excess;* in other words, a currency composed of inconvertible paper will always be greater in proportion to the commodities to be circulated by it, than a purely metallic currency, regulated by the natural laws of trade, would have been.

But when the currency of a country, whether composed of the precious metals, or of paper, becomes *redundant* from excessive issue, the price of labour and *all* commodities is enhanced in proportion to that redundancy.

In the mean time, when the foreign exchanges happen in the natural course of traffic to become unfavourable, it will (as we have already seen) become a question with the merchant or bill-seller who has to create a fund abroad to *draw against*, whether bullion or commodities are the more profitable consignment. As yet, we may suppose gold coin to be still circulated *along with* the inconvertible paper. The money price of gold bullion has consequently not yet been raised, for gold coin can still be converted into bullion, and bullion into gold coin, at the mint price.

But the money price of all *other* commodities has been raised by the excessive issues of paper-money. The export merchant or bill-seller, therefore, now no longer hesitates—he sells his bill at a premium which covers the expense, risk, and loss of interest attending the transmission of bullion, and secures a profit; while, were he to purchase ordinary produce at the high money price to which a redundant currency has raised such produce at home, and sell it abroad where no such excessive circulation has enhanced general prices, he would incur a positive *loss*. All his remittances are, therefore, now made in gold. But, at the same time that the elevation of general money prices has checked the *exportation* of commodities, it has encouraged the importation of commodities,—the merchant's rule being *to buy in the cheapest and sell in the dearest market*. The *debts* of the country are, therefore, still increasing, while its credits are still diminishing, and so the exchange will continue unfavourable to that country, until at length its whole metallic money is drained off, and nothing is left at home but paper-money, which is worthless abroad.

When the disease has reached *this* stage, the market price of gold bullion will partake of the general enhancement. That it must be so will be evident to any one who reflects on what it was which formerly preserved the market price and mint price of gold bullion *on a par*—it was the *power* which every one having $3\frac{143}{160}$ pounds sterling (L.3, 17s. 10½d.) of the gold coin possessed of instantly obtaining an ounce of standard gold by simply casting that coin into a melting pot. *This power* is now withdrawn, for there is no longer any gold coin in circulation. The merchant who wishes to export gold bullion must now *buy it at the market price*, and the greater the demand and the smaller the supply, the higher the market price will be.

Having got thus far, we are in exactly the same state as when labouring under the evil of a worn out and degraded metallic currency. Foreigners will not now calculate the par of exchange according to our *mint* price, but according to our *market* price of gold bullion, and if that market price be as before L.4, 5s. 8d. an ounce troy, the exchange will be against us to the same extent as when, by degradation of the sovereign, the nominal value of the pound sterling was 10 per cent. above its intrinsic value.

The *real* par, as in the former case, will be altered, and the market price of bills, though it will oscillate, as before, within the limits of the expense of transmitting specie, will gravitate towards a new centre, and this state of things, whatever be the amount of our imports and exports, debts and credits, will and must continue till the real par of exchange be again altered—till, through a contraction of the redundant circulation and consequent reduction of general money prices, the gold which had left us shall again flow back and become part of the circulation.

3*dly*, The application of the principles which have been stated to the circumstances of a country which has adopted a *double standard* of money, or which permits *both* of the precious metals, gold and silver, to be used at the same time as the *media* of payment, or universal equivalents in effecting exchanges, is sufficiently obvious.

The value of gold estimated in silver, or of silver estimated in gold, is less or greater according as the total supply of the one metal bears a greater or smaller proportion to the total supply of the other, and the ratio between the two metals adopted by the mint regulations of any country, how accurately soever it may have been adjusted at first, will afterwards vary with every fluctuation of the quantity either of gold or of silver, and with every alteration of the weight or fineness of the coins made of either metal.

This is a consideration of great importance as regards the foreign exchanges, because it is quite evident that that metal which happens to be overvalued in respect of the other will *drive that other out of the market*, and become itself the sole medium for effecting payments at home, and consequently the regulator of general money prices in the home market. "Men in their bargains," says Locke, "contract not for denominations or sounds, but for the intrinsic value."* The undervalued metal, therefore, will always be sent abroad, where it passes according to its full intrinsic worth, and the overvalued metal will always be kept at home, where it circulates by authority at its nominal value.†

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* Farther Considerations concerning the raising the Value of Money.—Works, edit. 1722, vol. ii. p. 69.

† Before 1834 the dollar of account of the United States was their silver dollar containing 371¼ grains fine. The gold eagle, by law a tender for 10 dollars, then contained 247½

To make this clear, let us suppose an extreme case. Suppose that the British government were to sanction both gold and silver as the *media* of circulation and payment,—as a like legal tender to any amount,—and that the value of silver in relation to gold in the market is as 15 to 1, in which case 15 ounces of fine silver would freely exchange for or be worth one ounce of pure

grains fine. The weight of pure gold in the eagle was thus ⅔ds of that of the silver in the dollar, and the relative value of gold to silver was therefore as 15 to 1. This being an under-valuation of gold in respect to silver, all payments were made in the latter metal, and the dollar of account and the silver coin were thus identical. But the act of Congress of June 28, 1834, reversed this system by reducing the amount of pure gold in the eagle to 232 grains, while it was still preserved as a legal tender for 10 dollars. No alteration having been made on the silver coin, the relative value of gold to silver became then nearly as 16 to 1, in place of 15½ or 15⅝ to 1, its true proportion. This was an under-valuation of silver which led speedily to its withdrawal from circulation, and to the general employment of gold, in which the value of the dollar of account was 1-10th of the new eagle.

Estimating standard silver at 5s. per ounce, and gold at L.3, 17s., 10½d. per ounce, the value of the old or silver dollar of account was 4s. 2½d. sterling, while that of the new gold dollar is only 4s. 1¼d. The practical effect therefore of the alteration of 1834 was to reduce the general money standard of the Union about 1⅝ per cent.

gold. Now suppose our mint regulations, instead of ordering one ounce of pure gold and 15 ounces of fine silver to be coined into *exactly the same sum of money*, were to order 15 ounces of silver to be coined into *double* the sum that one ounce of gold is coined into, or, which is in effect the same thing, suppose our silver coin, while legal tender, to be so worn or degraded (the gold coin remaining of full weight) that twice the number of silver pieces are required to make up 15 ounces of fine silver; then silver and gold in our currency will no longer be in the proportion of 15 to 1, but of 7½ to 1. All foreign remittances would then be made in gold; for a determinate sum, for example, one pound sterling in gold would go *twice as far* in paying our debts to foreigners as the same sum (L.1) in our silver coin.

In this situation of matters, our gold coin would be used exclusively for foreign remittances, and the price of gold bullion would come to be estimated, not in gold coin, but in the degraded or worn-out silver coin, and the market price would rise to double the mint price. That it would be so is plain; because if a merchant has a foreign remittance to make, and finds that double the quantity of silver coin, as compared with gold coin, is required to make up that remittance, he will remit sovereigns as long as one remains in circulation.

When two metals are made equally the standard of money, it is quite clear that the *real par* of all the foreign exchanges (whatever the *nominal par* may be) will be regulated with reference to that part of the currency which is composed of the overvalued metal. If the mint regulations value silver in relation to gold in the proportion of 7½ to 1, or double the supposed market proportion of the one metal to the other, the real par between London and New York, which we formerly stated to be *one pound sterling* for 4 dollars 87 cents, would be changed to *two pounds sterling* for the same sum in American money; because any one who, at New York, should give $4.87 for the right to receive in England one pound sterling, would, in reality, purchase a right to receive, not one pound sterling *in gold*, but one pound sterling in gold, OR, *in the option of the debtor*, one pound sterling in silver, worth intrinsically only ten shillings. Where the debtor has the option of paying *either* in the one metal *or* in the other, he will, of course, always prefer paying in the *least valuable* of the two; and the par of exchange is altered to $4.87 for *two pounds sterling*, because L.1 no longer means a sovereign of full standard weight and fineness, that is, containing 123¼ grains of gold $\frac{11}{12}$ths fine, but 20 degraded shillings, which in the market will purchase only *one-half* that quantity of gold. The $4.87 being, however, still equal to 123¼ grains of standard gold, they are equal to two pounds sterling or 40 degraded shillings, because 40 degraded shillings will purchase in the market only 123¼ grains of standard gold. The old *nominal par* of one pound sterling for 4 dollars 87 cents may still be retained, and the exchange, to the extent of the difference may now be *said* to be *against* Great Britain and in favour of the United States, but really and essentially, according to the equality of currencies, it is *at par* when it is *two pounds sterling* for 4 dollars 87 cents. The state of exports and imports, or rather of debts and credits, may make it diverge for a time from *this* point, but it has now as decided a tendency to regain this point, as *before* the wrong adjustment of the double standard it had to regain what was *then* the *real*, but is *now* only the *nominal* par.

So long as 20 degraded shillings are thus capable in our market of performing the same functions as a sovereign of full weight, or what is the same, 2000 degraded shillings reckoned equivalent to 100 standard sovereigns, so long will the bill-merchant send gold coin abroad, for the express purpose of drawing bills against the fund thus created; for by every such transaction the bill-merchant gains 100 per cent., *minus* the charges attending the transaction. What he transmits is 100 sovereigns, equal at home, *as money*, to 2000 shillings, and capable abroad of being converted without loss into 487 dollars or $48\frac{7}{10}$ eagles of standard weight and fineness. But a bill for 487 dollars can be sold here for 4000 shillings, thus leaving the bill-seller a profit of 100 per cent., minus his charges.

While this state of things continues, therefore, the gold coin will be exported, and bills will be drawn against such remittances, and sold in our markets, and this destructive system will go on till there is no gold coin left. After that it becomes a matter of pure indifference to the merchant or bill-seller, whether he remit 40 degraded shillings, equal intrinsically to one pound sterling, or pay 40s. for 123¼ grains of standard gold; and thus the market price of gold bullion will rise from L.3, 17s., 10½d. to double that sum, or L.7, 15s., 9d. an ounce.

But before things have reached this pass, the moment, in fact, that the gold coin has become so scarce that 123¼ grains of standard gold bullion, or whatever other quantity of standard gold is allowed by law to represent one pound sterling, will sell in the market for as much more than 20 shillings as will pay the expense of melting the gold coin, the *money jobber* sets to work,—he collects all the sovereigns of full weight he can get hold of, melts them, sells the bullion for 25s., 30s., 40s., or whatever be its market price,—exchanges the silver coin again for gold coin, which he again melts, with a like profit. The bill-seller having caused the gold to *dis*appear, the money jobber takes care that it shall not *re*appear. Every sovereign as it comes from the mint is laid hold of, and melted down, and this process will go on until the law is altered, and the ratio of gold to silver re-adjusted according to the market value of each, or until the wiser policy be adopted of allowing only one metal to form the standard of money.

It thus appears that alterations of the weight and fineness of the coins of either of two countries between which a par of exchange has been established, an enlargement of the circulation of either country by excessive issues of paper money, and changes in the relative value of two metals used indifferently as the standards of money, do all affect the foreign exchanges no otherwise than by altering the true par of exchange; and that the true par, thus altered, cannot be again changed or brought back to what it was originally, but by the restoration of the currencies to what they formerly were. Such alterations have been called alterations of the *nominal exchange*—they are in truth *alterations of the par.* Alterations, again, of the price of bills arising from the state of demand and supply have been called alterations of the *real exchange ;* while the *actual price* of bills in the market, as regulated by the combined action of the causes we have described, has been called the rate of the *computed exchange.* Deviations of the *nominal* exchange from par cannot be corrected but by rectifying the currencies, for the *par itself* has been changed. Deviations of the real exchange may be corrected by the enlargement or contraction of exports or imports, or, if not so corrected, the real exchange will *rectify itself,* by the influence which the price of bills exerts on the exportation and importation of specie and ordinary produce.

CHAPTER III.

When the exchange becomes adverse to a country in consequence of the redundancy of a purely metallic currency, perfect according to the mint regulations, or of a paper currency freely convertible into such metallic money, the true par of exchange is not altered, and the disorder will be corrected by the transmission of specie, but not by the exportation of ordinary produce.

ANOTHER, and most important, question with relation to the foreign exchanges yet remains to be discussed; namely,—Supposing a par of exchange to have been established between two countries, each using a *purely metallic money*, perfect according to the mint regulations of each, and composed of *one* and the *same* metal —whether a deviation of the *computed* exchange from par, caused solely by an enlargement or contraction of such metallic currency in either country, without a corresponding enlargement or contraction of the supply of commodities, is to be resolved into an alteration of the *real* or of the *nominal* exchange? Whether such deviation can be corrected, or will correct itself, by an increase or diminution of exports or imports, either of specie or ordinary produce? or whether such disorder can be rectified only by reducing the redundant metallic currency to its former amount in relation to commodities?

Before attempting a solution of these questions, let us first see the precise mode in which the expansion or contraction of a metallic currency affects the exchange.

To revert to our former illustration, the par of exchange between London and New York is supposed to be *one pound sterling* for four dollars 87 cents (valued in gold), or what is the same, L.100 for 487 dollars or $48\frac{7}{10}$ eagles. Now, while the coins of both countries are maintained in a perfect state, the intrinsic worth of the *sovereign* and *eagle*, in respect of each other, will remain unchanged. But we have seen that were the *market* price of gold bullion to rise above the *mint* price (an effect which, even in a perfect state of the gold coin, would follow from that coin being driven out of circulation by an excessive issue of inconvertible paper, or a relative overvaluation of the silver coin of either country), the exchange would deviate from par, or rather the true par would be altered. And *if* it could be shown that *this* effect, this deviation of the market from the mint price of gold bullion, would be produced by the relative expansion or contraction of a purely metallic currency, it must be granted that the foreign exchanges would rise or fall in consequence; and that the rise or fall so caused, being not in the real, but in the nominal exchange, being, in fact, an alteration of the true par of exchange, the deviation could not be rectified but by restoring the former ratio of money to commodities, that is, by melting down the superfluous coin, and so bringing back the currency to its former relative amount.

But this cannot be shown—the thing is in truth *impossible.* First, take the case of a metallic currency increased beyond the wants of circulation: the immediate effect of this will be the enhancement of the *money price of all commodities*. The total amount of gold in circulation having increased, without a corresponding increase of other commodities, gold estimated in commodities will be cheaper, and commodities estimated in gold will be dearer, than before. But it has been said, "If the value of currency is diminished, the prices of *all* commodities must advance, AND THAT OF BULLION AMONG THE REST."* This is clearly a *non sequitur;* for what means the expression, *prices of all commodities?* Most certainly *the value of commodities in relation to gold or money;* but it by no means follows that *because* the *value* of all *commodities* has advanced *in relation to gold, therefore* the *value of gold* must advance *in relation to itself.* But this is exactly the position maintained by some of our most eminent writers on currency.†

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* Blake's Observations on the Course of Exchange, p. 52.

† "*Bullion is a commodity, and nothing but a commodity, and it rises and falls on the same principle as all other commodities.* It becomes, like them, dear in proportion as the circulating medium for which it is exchanged is rendered cheap, and cheap in proportion as the circulating medium is rendered dear."—*Thornton on Paper Credit*, p. 202.

"*Nothing can be more evident*," says Mr Blake,* "than that *bullion* must be subject to the *same* variation in its PRICE from an alteration in the value of currency as any other commodity." Nothing, I presume to think, can be *less* evident. Gold, used as money, is a fixed standard for measuring the value of all other commodities, and if its value varied in the way here supposed, it would *cease to be money*, it would *cease to be a measure.* Where the gold coin is in a perfect state, and the proper mint regulations strictly observed, the *money price* of uncoined gold can no more rise or fall with the increase or diminution of the amount of gold in circulation, compared with the supply of commodities, than a yard measure (in Locke's language) *will lengthen or shrink* in consequence of an increase or diminution of the number of yard measures compared with the supply of cloth. The circulation, we may suppose, amounts to twenty millions of sovereigns. Will any one for *this* reason give more than one sovereign for 123¼ grains of standard gold?—or more than 3$\frac{143}{160}$ sovereigns for an ounce of the same? Certainly not,—and why?—because at little more expense "than will pay for the fire that is to melt the coin," by an operation "simple," requiring "little apparatus," performed "with the utmost secrecy, and incapable of prevention by any penalties of the law, or vigilance of the officers of the mint or bank,"* the holder of a sovereign may instantly convert it into 123¼ grains of standard gold, and the holder of $3\frac{143}{160}$ sovereigns may convert them into an ounce of standard gold. But the total circulation is now increased to *forty* millions, and the money price of commodities is doubled. But what difference does *that* make to the holder of one sovereign, or of $3\frac{143}{160}$ sovereigns? *He* can still obtain the same quantity of bullion, and by the same process, and at the same trifling expense. Why should a man who has L.3, 17s. 10½d. worth of the gold coin now give L.7, 15s. 9d. for an ounce of standard gold?—*he has it already in his pocket*,—for $3\frac{143}{160}$ sovereigns are not only of *equal value* to an ounce of standard gold,—THEY ARE an ounce of standard gold.†

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* Observations on the Course of Exchange, p. 51.

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* Blake's Observations on the Course of Exchange, p. 57.

† See Note (E) at the end of the volume.

The effect, then, of the enlargement of a metallic currency is to raise the money price of *all* commodities, *except* the metal of which that currency is itself composed. The mint and market prices of gold, therefore, continuing the same, the par of exchange, " the equality of currencies," in the case above supposed, will, *after* as *before* the enlargement of the circulation, be L.100 for 487 dollars, or $48\frac{7}{10}$ eagles.

But though the *nominal* exchange will not be affected by the relative enlargement of the circulation, the *real* exchange certainly will, and the actual course of exchange will become unfavourable to the country in which the redundancy prevails. The practical merchant does not regulate his operations by the par of exchange —his sole concern is with the relative money price of commodities at home and abroad—his guide is the price-current; and the plain rule, from which he never departs, is " to buy in the cheapest, and sell in the dearest market."

But it is evident that of two countries, the one labouring under a redundant currency, and the other having no such redundancy, the *first* must be the *dearer*, and the *second* the *cheaper*

BOOK V.

market—the merchant, therefore (whilst this state of matters lasts), will *buy* in the *second*, and *sell* in the *first*. Suppose Great Britain and the United States to be these markets, the British currency redundant to the extent of 10 per cent., the American not so. The current of trade, the stream of commodities (if I may use that expression) will flow mainly in one direction. The exports from New York to London will be greater than from London to New York, and of consequence London will soon come to owe New York more than New York owes London. The real exchange will in consequence deviate from par. Suppose it to deviate so far, that 110 sovereigns are required to purchase a bill on New York for 487 dollars, and, *vice versa*, that a bill on London for 110 sovereigns may be purchased at New York for 487 dollars, the par being, as before explained, L.100 for 487 dollars, or $48\frac{7}{10}$ eagles. Now here is a derangement of the real exchange, like that to which we formerly referred, and as in the former case the deviation was corrected, and the exchange brought back to par, by the exportation of commodities, it may naturally be thought that the same remedy will now cure the same disorder. That it will not however is demonstrable—the cause of the disease is different, and the remedy demanded is also different.

Revert to the state of prices, both of bills and commodities, *before* the supposed enlargement of the British currency. The ordinary rate of profits in both countries we may suppose to be 15 per cent., and the currencies of Great Britain and America being in their due proportions, the British merchant, we will suppose, could buy *cloth* in the English market for L.100 sterling, and sell it again at New York for $560.05, or with a profit of 15 per cent., while the New York merchant could buy *raw cotton* in the American market for 487 dollars, and sell it again in England for L.115, or with a like profit.

The British currency becomes redundant, and general money prices in England rise 10 per cent. The exchange has not yet diverged from par.

The raw cotton, which still costs in America 487 dollars, can now be sold in England, not for L.115, but for L.115 + 10 per cent., or

L.126, 10s. More cotton will therefore be sent from America to England, in order to take advantage of this advance of price.

The case of the London exporter will just be the reverse. The cloth which formerly cost him L.100 now costs him L.100 + 10 per cent., or L.110, while, if sent to New York in the same quantity, it will sell for only $560.05 as formerly, thus leaving the London exporter less than 5, instead of full 15 per cent. Exportation from London to New York will therefore be checked and discouraged.

But the exports from New York to London being greater, and those from London to New York less than before, London will come to owe New York more than New York owes London.

The real exchange will now deviate from par—it will become more and more unfavourable to England during the progress of the change, and when the augmentation of the currency has produced its full effect, the exchange will be 10 per cent. against London, and in favour of New York.

Now, under this new rate of exchange, trade may still be carried on, and with the same profits as before, but if so, another change will take place, for, to the extent of 10 per cent., the profits of the exporters on both sides will be transferred from the commodities to the bills.

The American exporter now buys his cotton for 487 dollars (equal at par to L.100), and sells it for L.126, 10s., thus *apparently* realizing a profit of 26½ per cent., but he does not gain the profit *in reality*, for the bill which he draws on his London correspondent for L.126, 10s., he sells for 10 per cent. *less* than he ought to receive according to the equality of currencies—his profit, therefore, in reality is less than 15 per cent., or more accurately 13$\frac{17}{20}$ per cent., in consequence of the premium of 10 per cent. being computed on the net cost and profit, while the discount of 10 per cent. is reckoned on the gross worth.

The London exporter, again, buys his cloth for L.110, and sells it for $560.05 (equal at par to L.115), and his profits are *apparently* reduced to less than 5 per cent., but *in reality* he still has 15 per cent., for the bill for $560.05, which he draws on his American correspondent, the state of the exchange enables him to sell for L.126, 10s.—he thus obtains a profit on his draft of 10 per cent., or L.11, 10s., and L.5 profit on his goods, together L.16, 10s., or 15 per cent. on the original cost of L.110. What he loses on his commodity he gains on the sale of his bill.

When markets are otherwise favourable for exporting and importing, therefore, trade may be carried on under an adverse exchange. Exports and imports under the new state of the exchange may be again *brought to equality* and *kept at equality;* but the question still remains to be solved, how can the exchange be brought back to par? and how is the adverse debt which was created during the progress of the deviation, and which was in truth the cause of that deviation, to be paid? London, it is evident, must export to an *additional* extent,—must export *beyond equality*,—in order to effect this.

First of all, let us suppose an attempt made to do this by the exportation of ordinary commodities. *More* cloth is sent to the American market, but the former supply of that commodity was equal to the demand, and if that supply be *still farther* increased, two results will follow: 1*st*, The supply of English cloth in the American market being greater in proportion to the demand than before, its price will fall—if it should fall 5 per cent. in the case supposed, the profits of the merchant on that commodity would be annihilated. But, 2*d*, If the additional exports have the effect which they are intended to have, of improving the exchange, the premium on the bill drawn against these additional exports, and which constituted more than two-thirds of the exporter's profits, will likewise be taken away, or greatly reduced.

These double effects of an attempt to pay the adverse debt by exporting ordinary produce will prevent the deviations of the exchange from being corrected in this way. But the important thing to note is, that even *were* the deviation corrected, *the disease is not removed.* Our currency is *still* as redundant as before, and every yard of cloth *exported to pay the debt,* every per centage taken from the exchange, would *cause* an exactly *corresponding addition to the exports from New York to England.* The adverse exchange was in truth the only *counterweight* to our redundant currency—it was the unfavourable exchange specifically which brought exports and imports again to equality, and enabled trade to be carried on after the change—it was the premium received in London on his bill which enabled the English merchant to export to the same extent as before—it was the discount paid at New York on the corresponding bill which prevented the American merchant from increasing *his* exports still more. Every *addition*, therefore, to *our* exports *beyond equality* will be met by corresponding *additional exportation on the other side*, and every attempt to bring the balance even will be effectually frustrated by the foreign merchants putting an exactly equal weight in the opposite scale.

But observe how very different would be the effect of London exporting *specie* to New York. Every ounce subtracted from the British circulation would, *pro tanto*, diminish general money prices in the English market, and would also by so much bring the exchange nearer to par. New York would now have no inducement to load the opposite scale, for although the price of the goods of the New York merchant be reduced here, the discount on his bill is reduced *to exactly the same extent.* If the price of his goods be reduced by 5 per cent., the discount on his bill is also reduced by 5 per cent., and when the price of the goods is again L.115, the exchange is again at par. Throughout the whole process, profits continue steadily at 15 per cent. The London merchant will experience the same effects. For every pound taken from the premium on *his* bill, his goods cost him one pound less; and when the exchange is again at par, the price of his goods will be L.100 as before; his profits also continuing steadily at 15 per cent.

The exportation of specie, then, is the appropriate remedy for a redundant, though perfect, metallic currency; but it must always be remembered, that it is impossible for a purely metallic and well regulated currency, by its redundancy, to affect the foreign exchanges to a greater extent than the expense of transmitting specie. In the case just supposed, if the expense of sending specie to New York were 2 per cent.,* our currency could not be comparatively redundant to a greater extent than 2 per cent., because at this point the surplus gold would begin to flow off, and so check any farther rise of general prices, or any farther deviation of the exchange from par.

But it is of great importance to remark, that where the disturbance of the exchange arises from an alteration of the real par, as in the case of a degraded metallic currency, or a currency redundant by the relative over-issue of inconvertible paper, the *enhancement of the market price of bullion* is no certain measure of the *enhancement of the general price of commodities* which may arise from the same cause. In the case of degradation, the market price is regulated by the extent of the degradation; and in the case of redundancy from the over-issue of paper money, bullion becomes an ordinary commodity, which may be more or less in demand for the payment of our debts abroad or conversion into plate at home; but the *ratio* of the supply of bullion to the demand for bullion may be very different indeed from the *ratio* of the supply of other commodities to the demand for them.

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* At present the charges are, freight 10s., insurance 15s., and reckoning interest so high as 5s., the expense altogether will not exceed 1¼ per cent.

Although the transit of specie is the appropriate and natural remedy for an adverse exchange, created by a redundant though perfect metallic currency, it does not follow that the redundant specie exported for this purpose must be sent to any *one* country, so as to enhance general prices there at the same time that general prices are reduced at home. Its exportation to *any* country where it may be wanted will produce the same effects on the exchange with any *other* country as its direct exportation to the latter. If London be indebted to New York, and Amsterdam indebted to London for specie, or any other commodity, New York may be paid as effectually by London drawing on Amsterdam as by directly remitting specie to New York.

We have thus endeavoured to show, 1*st*, That when the exchange becomes unfavourable to a country by the diminished exportation or increased importation of commodities in the ordinary course of traffic, the par will be restored by an increased exportation of commodities from the debtor to the creditor country. 2*d*, That when the exchange is adverse to a country from the redundancy of money causing the same diminution of exports and increase of imports, the exchange will be brought again to par by the exportation of specie from the debtor to the creditor country; and, 3*dly*, That where the unfavourable exchange is caused by a degradation or debasement of the currency, or by the relative over-issue of inconvertible paper, or by overvaluing one of two metals improperly allowed to form a double standard of money,—in all cases, in short, where the disorder of the exchange consists of an alteration of the par, no enlargement of exports, or abridgment of imports, whether of commodities or specie, will restore the exchange to what *ought* to be its par were the currencies of both countries in a perfect state. The rectification of the disordered currency is in such cases the only remedy.

From the *second* of these conclusions, it plainly follows, that where a purely metallic currency, composed of one metal, as gold, is used, the currency cannot *continue* redundant, but will always *right itself* through the exportation of the superfluous gold. Nor will it make any difference in this respect, if, instead of the *whole* currency being composed of gold, *a part* of the currency shall consist of *paper credits*, or obligations by government, by a public corporation, or by private individuals of undoubted wealth, to pay so much gold to the holder of such credits on demand.

Bank-notes, instantly convertible into gold at the option of the holder, cannot, if issued under proper regulations, become depreciated, or sink in value, as compared with gold,—they truly represent gold, and, to a certain extent, may be substituted for it. We say *under proper regulations;* for, 1*st*, it is obvious that as bank-notes are nothing *in themselves*, or in the eyes of foreigners, but *so much paper*, a due *proportion* of the currency must still be metallic,—such a proportion as shall answer all the purposes of foreign trade,—such a proportion as will sustain the currency in the case of an adverse exchange.*

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* The true principles of currency, exchange, and banking are very clearly stated in a recent work, *On the Regulation of*

When an unfavourable exchange is caused by a redundant currency, no substitute for gold can avail for its permanent restoration to par.

Currencies, by Mr Fullarton, who forcibly, and, I think, conclusively argues, that bank-notes, being issued on *loan*, and therefore *returnable*, at stated times, to the issuers, can never clog the market by their redundance, provided their perfect convertibility is secured.—*Fullarton on Currency and Banking*, 2d edition, p. 67.

It must be granted that a really convertible bank-note circulation "will at all times fluctuate exactly as a purely metallic circulation would fluctuate," and cannot fluctuate differently.

But it must also be granted that the value of a purely metallic currency *does* fluctuate—that the ratio of money to commodities (which varies with the increase or decrease of *either*—and the increase or decrease is oftener on the side of commodities than of money) is frequently such as to elevate or depress the money price of commodities, or their value in relation to gold,—diminishing or increasing the value of even a purely metallic currency to such an extent as to cause a fall or rise of the exchange, and a consequent efflux or influx of specie.

A *mixed* circulation, the value of which varies with the variations in the value of the coin, is not only liable to the *same* fluctuations, but it is evident that when a drain from a mixed currency commences, *the metallic portion of it* alone will be sent abroad.

Assuming, then, that a mixed circulation of coin and convertible notes will not *upon the whole* exceed the amount of a purely metallic circulation, the question still remains, May

Bullion or *bankruptcy* are the alternatives. No exportation of ordinary produce can cure the disease. The exportation of specie *alone* can restore trade to its healthy state.

But, 2*d*, to make sure that a due proportion of gold shall always be at command for the purposes of foreign trade, and to make sure, more especially, that when the circulation is in process of reduction by the exportation of specie, it shall not at the same moment be receiving corresponding augmentations by bankers, for their own profit, pouring additional supplies of paper upon the market, every banker who is

not the bank-note portion be greater than the metallic basis warrants, and by so much as to endanger convertibility?

The policy of Sir Robert Peel's recent measures does not necessarily turn upon the question, *Whether convertibility alone will secure us a mixed circulation of gold and bank-notes which will fluctuate exactly as a purely metallic circulation would fluctuate*; which is the question broached by Mr Tooke, and argued so ably by Mr Fullarton, but upon a different question, namely, *Whether, in order to ensure convertibility, and preserve gold and bank-notes in due and safe proportion to each other, it is necessary to impose a legislative restraint on the credit-issues of bankers, leaving their issues upon coin and bullion free and unrestrained?* Both questions, I take it, may safely be answered in the affirmative.

allowed to issue notes ought, not merely to give surety for the payment of these notes,—the public ought to be certiorated, not only that the person who is allowed to exercise one of the functions of sovereignty, by issuing money, is a person of undoubted wealth,—but that he always has at his command, and under his immediate control, *the specific thing*—GOLD—which he promises to deliver to the holders of his notes "on demand."

Every issuing banker, therefore, should be obliged by law to keep *in his coffers* a certain amount of specie or bullion, and publish the amount of his assets and engagements to the world. When gold is the material of money, a bank-note is nothing but a *warrant* entitling the holder to demand, and receive on demand, so much *gold*. It matters not that the banker who issues that note is rich in land, or houses, or commodities; if he has not in his coffers *gold* to the amount likely to be wanted by the holders of his notes, he has not the means of fulfilling his engagements. Were a government to issue "promises to pay" *gold* on the security, and to the extent, of the supposed value of all the *land*[*] of a kingdom, these "promises to pay" would be nothing better than inconvertible paper-money, and might sink in value as much as did the notorious *assignats* of France.

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[*] A land-bank was one of the extravagant projects of the celebrated John Law, Comptroller-general of the Finances of France, better known as the author of the notorious Mississippi scheme. Law has been justly designated a political quack, and yet there are in his books occasional approximations to sound ideas on the subject of money. For example, "Silver in bullion or money changes its value, from any change in its quantity, or in the demand for it: in either of these cases goods are said to be dearer or cheaper; but 'tis silver or money is dearer or cheaper, being more or less valuable, and equal to a greater or lesser quantity of goods.

. . . .

An ounce of silver being worth 5 shillings and 2 pence, and a crown worth 60 pence, unless altered by the prince, makes most people insensible of any change in the value of silver or money: but as one year the boll of barley is sold for 2 crowns, and the year after for 3; this difference comes from a change in the quantity or demand of the barley, or of the money: and that of the money will occasion a difference in the price, as well as that of the barley. If last year 100 sheep were sold for 100 crowns, and the person who sold them desires this year to buy the same number of sheep; though the quantity of the sheep, and the demand for them, be the same as last year: yet if the money is increased in quantity, and the demand for it not increased in proportion, the 100 sheep will be equal in value to more money than the year before, so the money is cheaper, if the quantity of

Land is not the thing for the instant delivery of which the warrant called a bank-note has been issued,—that thing is *gold*; and if such warrants are to retain their value, as a substitute for gold, it is certainly not enough that the issuer shall, in a general way, be a rich man; he must have in his coffers, and ready for immediate delivery, the specific commodity which he has engaged to deliver.

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the money and the demand for it be the same as before; yet if the sheep are lesser in quantity, or the demand for them greater: the 100 sheep will be equal to a greater quantity of money, so the sheep are dearer."—*Money and Trade Considered, by the celebrated John Law, &c.*, Glasg. edit. 1760, pp. 116, 117.

CHAPTER IV.

When the exchange is favourable to a country in consequence of the reduction in numerical amount of a purely metallic currency, perfect according to the mint regulations, or a paper currency freely convertible into such metallic money, the true par of exchange is not altered; and the disorder will be corrected by the importation of specie, but not by the importation of ordinary produce.

We now come to a case directly the reverse of the one last considered, namely, the case of a favourable exchange caused by a *contraction* of one of the currencies, and as the effect of a redundant currency was seen to be to raise the price of *all* commodities *except* the metal of which the currency is composed, so the effect of contracting the circulation must be to reduce the price of all commodities except the material of money.

Here again we must remember the merchant's practical rule, "to buy in the cheapest and sell in the dearest market." But it is plain that of two countries, in one of which general money prices have just fallen from a contraction of the currency, without any corresponding fall in the other, the first must be the cheaper, and the second the dearer market. Let Great Britain and the United States of America be again these two countries, and Great Britain the country in which the contraction of the circulation has reduced general prices. The current of trade, the stream of commodities, will (while matters remain in this state) flow mainly *from* Great Britain *to* the United States. New York will import from London to a greater amount, while London will import from New York to a less amount. New York will, therefore, soon come to owe London more than London owes New York. The coin of both countries being, by supposition, of full weight and fineness, according to the mint regulations of each, the par of exchange will be as before, one sovereign for one dollar 87 cents (estimated in gold), or L.100 for 487 dollars or $48\frac{7}{10}$ eagles; but at New York the demand for bills on London being greater in proportion to the supply, the real exchange will deviate from par.

Revert to the state of prices both of bills and commodities before the supposed contraction of the British currency. The ordinary rate of profits we have supposed to be 15 per cent., and that while the currencies of both countries are in their due proportion, the London merchant can buy cloth in the English market for L.100, and sell it again at New York for $560.05 (equal at par to L.115), or with a profit of 15 per cent.; and that the New York merchant can buy raw cotton in the American market for 487 dollars, and sell it again in the English market for L.115, or with the same profit.

The British currency is now contracted in numerical amount, and general money prices here fall 10 per cent. The exchange has not yet deviated from par.

The raw cotton which still costs in America 487 dollars, can now be sold in England, not for L.115, but for L.115 *minus* 10 per cent., or L.103, 10s. *Less* cotton, therefore, will be exported from America, for the fall of prices in England will check and discourage its exportation.

On the other hand, the cloth which formerly cost in London L.100 will now be purchased for L.90, and can still be sold at New York for $560.05. *More* cloth, therefore, will be exported from London in consequence of this reduction in its cost.

But the exports from London being greater, and those from New York less than before, New York will come to owe London more than London owes New York.

The real exchange will now deviate from par. It will become more and more favourable to Great Britain during the progress of the change, and when the contraction of the British circulation has produced its full effect, the exchange will be 10 per cent. against New York and in favour of London.

Now, under this new rate of exchange, trade may still be carried on; but the profits of the exporters on both sides will, to the extent of 10 per cent., be transferred from the commodities to the bills.

The London exporter buys his cloth for L.90 (equal at par to $438.3), and sells it for $560.05 (equal at par to L.115), thus apparently gaining a much greater profit than 15 per cent; but on the sale of the bill which he draws on his American correspondent for this sum, he must submit to a discount of 10 per cent., or $56.005, which leaves him $504.045—his profit is thus only $65.745 (equal to L.13, 10s.), or 15 per cent. on L.90.

The New York exporter, on the other hand, buys his raw cotton for 487 dollars, and sells it in England for L.115 *minus* 10 per cent., or L.103, 10s., and his profits are apparently reduced to $3\frac{1}{2}$ per cent.; but they are not in reality reduced to this extent, though not quite so great as before; for he obtains a premium on his bill equal to 10 per cent. on L.103, 10s. or $10\frac{7}{20}$, making altogether $13\frac{17}{20}$ per cent. The profits of the merchant who exports to a country where general money prices have fallen can never be fully made up to him by the premium on his draft, because the reduction of general prices acts upon the *gross* worth of his commodity, while the premium is received only on the *net* amount for which he draws on his correspondent. In the instance just given the New York merchant loses 10 per cent. on L.115, while what he gains is 10 per cent. on only L.103, 10s. Were the rise in the value of British money to go farther, the profits of the foreign merchant would be still farther reduced, and at length wholly annihilated. Suppose general prices in England reduced by 50 per cent., the cotton which cost 487 dollars in America, would now be sold in England for L.115 *minus* 50 per cent., or for L.57, 10s. All that the foreign merchant could draw for against this consignment would be L.57, 10s., and supposing the exchange to be 50 per cent. against New York, the merchant would obtain a premium of 50 per cent. on L.57, 10s., equal to L.28, 15s. He would thus receive altogether L.86, 5s. And instead of having *any* profit, he would *lose* 13¾ per cent. by the transaction.

But it is idle to speculate farther on the results of an attempt to bring back the exchange to its true par by the exportation of ordinary produce from the debtor to the creditor country in a case where the deviation is caused by the contraction of one of the currencies. For even if the foreign merchant *could*, in the case we have supposed, increase his consignments of cotton *without* a reduction of his profits, and without the price of his commodity giving way still farther under the combined action of a contracted currency and an enlarged supply—even if he could, by so increasing his exports, produce the desired effect of correcting the deviation of the exchange, he would just, by so much, increase the disorder which it was his object to cure; for our currency would, after such increased exportation, remain as deficient, as much contracted as before.

The adverse exchange *counterbalanced* the advantage which the English merchant would otherwise have reaped from the general reduction of money prices; it was the premium received abroad which enabled the foreign merchant to export after this fall of prices; it was the corresponding discount to which the English merchant was obliged to submit that prevented him from increasing his exports still more. Every addition, therefore, to the *foreign* exports will be met by additional exports, to a corresponding extent, *from England;* and by how much nearer the exchange is brought to par, by so much greater will be the inducement to load the rising scale, so as to prevent the balance from regaining its equilibrium.

The effect of exporting *specie* from the United States to England would be very different. Every ounce of gold added to the British circulation will by so much raise general money prices, and by so much enable the goods sent to the English market to sustain the action of the falling premium on the bills drawn against these goods, for just as that premium falls general prices will rise; while in England, the inducement to export to an additional amount will be lessened. The discount on foreign bills will indeed fall as the exchange approaches nearer to par, but the money price of British products in the home market will at the same time continue to rise, leaving the exporter only the ordinary rate of profits.

CHAPTER V.

Theory of exchange in connexion with the theory of profits—Where the material of money is supplied through the medium of foreign trade, a fall of natural profits is followed by the same addition to the circulation, and re-adjustment of prices, which would take place in a country having mines of its own.

BEFORE proceeding farther we must request the reader to turn back and again peruse the 9th and 10th Chapters of the 3d Book, and the 4th Chapter of the 4th Book. But it may be proper here to remind him that a fall of what we have ventured to call the natural rate of profits in any country is preceded by an increase of population, an *enlargement* of the *supply of labour*, and a consequent *reduction* of the *value of labour*, whether estimated in *corn* or *gold*, and that consequently, where a country has mines of its own, the supply of gold is increased until the money price of labour is raised so high as to leave the miner the *new* general rate of profits, and nothing more.

Now, if this theory of profits be good for anything, it is incumbent on us to show that—where a country has *no* mines of its own from which its supplies of money can be obtained, and when, consequently, these supplies are obtained through the medium of trade and the foreign exchanges—a general fall of profits will produce, *necessarily* and *unavoidably*, such an importation of gold, such an addition to the circulation, and consequent rise of money wages, as shall leave to the producers of our exports the natural rate of profits, and nothing more.

Let us suppose the ordinary rate of British profits to be, as before, 15 per cent., and that for the maintenance of an advancing population, and from the causes described in the 4th Book, recourse is obliged to be had to inferior land, which will yield no greater surplus than 10 per cent. The money price of labour in the mean time has fallen, and, temporarily, there is a general enlargement of supply, and a general reduction of money prices in all departments of production—there is, in short, more of every thing in the market *except money*. Now this, though nearly the same, is not exactly the same case as the one explained in the last chapter, namely, the case of a country with a contracted circulation, for in *that case* the *ratio* of money to *all* commodities in our markets, *whether of home* or *foreign production*, being diminished, the price of all these products was supposed to fall by 10 per cent. In the case now supposed, the *ratio* of *home* products to money is increased, which, as regards *them*, is the same thing in effect as a contraction of the circulation; but then there is no change in the proportion between the money in circulation and the supply of *foreign* products in our markets, and if there be no reduction in the cost of production abroad, it is certain that foreigners will not give us their commodities for less money than formerly, however our altered circumstances at home may make *us* content with smaller profits.

Now the merchant's rule still being to buy in the cheapest and sell in the dearest market, New York will not export to London *more* American produce than formerly, for our market, as regards such produce, is neither a dearer nor a cheaper market than it was before; and if the supply of such produce be farther increased, its price will fall, so as no longer to leave the ordinary rate of American profits, which we suppose, as in the last case, to be still 15 per cent.

But there is not the same reason for the English producer continuing to limit *his* exports, for we assume that in no department of native industry can he now realize more than 10 per cent.; and the money price of British produce having generally fallen, the English merchant will be content to increase the supplies of such produce in the American market, until the prices there are so reduced as to leave him only 10 per cent.

But the exports from England to the United States being greater, and those from the United States to England no greater than before, New York will come to owe London more than London owes New York.

The real exchange will now deviate from par. It will become more and more favourable to

England during the progress of the change, and when the increase of exports from England to the United States has produced its full effect, the exchange will (let us suppose) be 5 per cent. against New York, and in favour of London.

At first, after this change, the London exporter will buy his cloth in the English market for L.95, and sell it in the American market for $560.05 (equivalent to L.115), realizing temporarily a very high profit, equal to the difference between 95 and 115, or more than 20 per cent. He will, therefore, go on exporting cloth, till, on the one hand, the additional supplies thus poured into the foreign market shall so reduce its price, and till, on the other, the additional exportation shall so increase the discount on his bills, as to leave him no greater profit than 10 per cent. He can, in short, increase his exports until, by the double action of these causes, his profits are reduced from 20 to 10 per cent.

On the other hand, the New York exporter still sells his cotton in England with a profit of 15 per cent. Before the exchange deviates from par, he cannot increase his exports without diminishing his profits. After the exchange deviates from par, he receives a premium on his bill in addition to the profits on the price of his goods, but even after this, if he shall increase the exports of ordinary produce beyond the former amount, what he gains on the exchange he will lose on the price of his commodity. And *if* his operations have the effect which they are intended to have, namely, the effect of correcting the deviation of the exchange, his profits might be annihilated by the reduction of the *price* on the one hand, and of the *premium* on the other.

But such operations *cannot* produce this effect; for here, as in the case of an enlargement or contraction of the circulation, even if the foreign merchant could get quit of the adverse action of falling prices in the English market, his additional exportation would hold out an irresistible inducement to the English exporter *to put a corresponding weight into the opposite scale.* For the effects of the falling price of the additional foreign produce in our markets are *counteracted* by the premium on the bill in the foreign market; and to bring the exchange nearer to par is just to modify this counteracting cause. But this is not all—it was the corresponding discount taken from the bill of the English exporter which put a stop to the farther increase of *his* exports; and the operations of the foreign merchant, in as far as they have the effect of correcting the deviation of the exchange, tend directly to remove this check; and so the very means taken to remedy the evil will in reality increase it. The cause of the disease is the increased *ratio* of commodities to money in the English market, and until the former ratio is restored by an enlargement of the circulation, the disorder of the exchange will continue.

By the transmission of specie, either directly from the United States, or from some other country to which American produce may be exported, the exchange will at once be restored to par, and money prices will again rise in England, till the difference between the price of English products in the home market and the price of the same products in the foreign market shall be equal to the now reduced natural rate of profits in England. The restoration of money prices in England will enable the foreign products sent thither to sustain the action of the falling premium on the bills drawn by the foreign merchant, for as that premium falls money prices will rise, while the reduced discount on foreign bills drawn here against English exports will hold out no inducement to a farther increase of these exports,—the reduction being accompanied with a corresponding rise of the price of English products in the home market.

APPENDIX.

APPENDIX.

NOTE (A).—Book II. Chap. II.

NOTE A.

Mr Ricardo first of all lays down the rule broadly and unqualifiedly that " the *value* of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of *labour* which is *necessary for its production*."—(*Principles of Political Economy and Taxation*, 3d edition, p. 1). " That *this* is really the foundation of the exchangeable value of all things, excepting those which cannot be increased by human industry, is a doctrine of the utmost importance in political economy," &c. (*Ib*. p. 4). Now, observe the number and magnitude of the exceptions to the rule thus broadly laid down in the outset, and afterwards resumed, and most ingeniously reasoned upon, throughout Mr Ricardo's work.

1. The rule itself contains, *in gremio*, an exception of all commodities produced under a natural monopoly or an artificial monopoly, which can be made effectual—

NOTE A.

these "cannot be increased by human industry;" and, *therefore,* "the labour realized in them" does *not* "regulate *their* exchangeable value."

2. Mr Ricardo admits (p. 25), that "the principle that the quantity of labour bestowed on the production of commodities regulates their exchangeable value, is *considerably modified* by the employment of machinery, and other fixed and durable capital." He says (p. 28), "if men employed *no machinery* in production, *but labour only,* and were all the same length of time before they brought their commodities to market, the exchangeable *value* of their goods would be precisely in proportion to the *quantity of labour* employed." Be it so; but as men *do* employ machinery, and not labour only, in the production of *almost every* exchangeable commodity, so to almost no one commodity can Mr Ricardo's theory be applied, without a considerable modification, a modification in truth so considerable, as well nigh to annihilate the rule altogether. Indeed it is difficult to say to *what* department of industry such a principle can be applied. It evidently does not apply to the cotton, woollen, or silk manufactures, to agriculture or mining, to the production of cutlery or hardware, earthenware or china, or any of our great staples, for in all these machinery and other fixed and durable capital *are* employed. But again, Mr Ricardo says (p. 28), "if they employed fixed capital of the same value and of the same durability, then, too, the value of the commodities pro-

duced would be the same, and they would vary with the greater or less quantity of labour employed on their production." But they do *not* employ fixed capital of the same value, or of the same durability; and, *therefore*, the value of the commodities is *not* the same, and it does *not* vary with the greater or less quantity of labour employed on their production.

3. Mr Ricardo (p. 34), thinks it "hardly necessary to say that commodities which *have* the *same* quantity of labour bestowed on their production will *differ* in exchangeable value if they cannot be brought to market *in the same time.*" In this case, the "principle" that the quantity of *labour worked up* in commodities *regulates their value*, goes absolutely for nothing, for there are scarcely two trades in the world where the producers "are the same length of time before they bring their commodities to market."

4. Mr Ricardo having, from the principle to which we have so often referred, deduced the farther "principle that *value does not vary with the rise or fall of wages*" (p. 36), finds afterwards that *this* derivative *principle* is modified also by the unequal durability of capital, and by the unequal rapidity with which it is returned to its employer" (p. 36). In by far the *greater number* of employments, therefore, value *does* "vary with the rise or fall of wages," inasmuch as in almost all departments the capital employed *is* "of unequal dur-

NOTE A. ability," and returns to its employer with very "unequal rapidity."

5. Mr Ricardo's theory is self-contradictory—its parts will not hold together. Take, for instance, the following passage (p. 18):—"If we look to a state of society in which greater improvements have been made, and in which arts and commerce flourish, we shall still find that commodities vary in value conformably with this principle" (the principle that the exchangeable value of commodities is in proportion to the labour bestowed on their production): "In estimating the exchangeable value of stockings, for example, we shall find that their value, comparatively with other things, depends on the total quantity of labour necessary to manufacture them and bring them to market. First, there is the labour necessary to cultivate the land on which the raw cotton is grown; secondly, the labour of conveying the cotton to the country where the stockings are to be manufactured, which includes a portion of the labour bestowed in building the ship in which it is conveyed, and which is charged in the freight of the goods; thirdly, the labour of the spinner and weaver; fourthly, a portion of the labour of the engineer, smith, and carpenter who erected the buildings and machinery, by the help of which they are made; fifthly, the labour of the retail dealer, and of many others whom it is unnecessary further to particularize. *The aggregate sum of these*

various kinds of labour determines the quantity of other things for which these stockings will exchange, while the same consideration of the various quantities of labour which have been bestowed on those other things will equally govern the portion of them which will be given for the stockings." I make no apology for quoting this passage at length, because here we see Mr Ricardo's theory carried out to its legitimate results, and we find that the whole is founded upon a proposition which involves a direct contradiction. Suppose that by some new process of arithmetic we *could* reckon up the labour and "portions of labour" employed in the production of the stockings; and suppose the labour expended in producing two pairs of them were found to be exactly equal to the labour bestowed in making a hat: *two* pairs of stockings would then, according to Mr Ricardo, exchange for one hat. The labour employed in producing the stockings regulates, by hypothesis, *their* value. Suppose that labour to be doubled, a hat will then, by the same hypothesis, exchange for only *one* pair of stockings instead of two pairs. But *if so*, the labour worked up *in the hat* is no longer a criterion of *its* value, at least of its value estimated in stockings. Again, change the circumstances, and suppose *the labour now necessary to the production of a hat* to be *doubled*, the labour employed in producing the stockings being exactly the same as before, *one* hat will now exchange for four pairs of stockings instead of *two* as formerly. Here then we have, on Mr Ricardo's own showing, the value of stockings in relation to hats *reduced by one-half, without any change whatever* in the labour *employed* on their production. If it be said that the change consists in the value of the *hat* being *doubled*, and not in that of the *stockings* being reduced by one-half, then I answer that this is a mere play upon words. Mr Ricardo at the very beginning of his work (p. 1) uses the expression, "value of a commodity," as synonymous with "*the quantity* of any other commodity for which it will exchange." This is his definition of value, and it is a correct definition. To talk of *value* without reference to some other commodity, in which that value is estimated, is *meaningless;* and if the value of a commodity be changed in consequence of the altered conditions under which *another* commodity is produced, without any change in the labour bestowed on the commodity itself, then it follows that the labour worked up in that commodity is not a standard measure of its value, nor is it the foundation of that value. Suppose every commodity in the market, *except* stockings, to be produced by *double* the former quantity of labour (the thing is conceivable), the *same* quantity of stockings would now, on Mr Ricardo's principles, exchange for only *one-half* the former quantity of everything else, yet, according to that author, no change would *even then* have been effected in the value of the stockings. This is plainly absurd, because it contradicts the definition of value previously given. But although this were got over, the difficulty presented by Mr Ricardo's theory is not surmounted; for, unfortunately for that theory, the shipowner, the spinner and weaver, the engineer, smith, and carpenter, all those furnishing the labour, or portions of labour, realized in the stockings, "employ machinery and fixed capital of unequal durability," and find "their returns come in with unequal rapidity;"—so that, *in no sense whatever*, can it hold true that "the sum of the labour" employed in producing the stockings regulates their value, or the value of the other commodities for which they may be exchanged.

6. But assuming that the natural price of commodities is regulated, as Mr Ricardo supposes, by the quantity of labour employed on their production, the question may naturally be asked, how and by what means is the market price, when it happens to deviate, brought back again to the natural price? Mr Ricardo admits that the market price may be, and often temporarily is, different from the natural price; for, in another part of his work (p. 80) he says: "In making labour the foundation of the value of commodities, and the comparative quantity of labour which is necessary to their production, the rule which determines the respective quantities of goods which shall be given in exchange for each other, we must not be supposed to deny the accidental and temporary deviations of the

actual or market price of commodities from this their primary and natural price." And, in the following passage (p. 83), he explains the mode in which these deviations are corrected: "Let us suppose that all commodities are at their natural price; and consequently that the profits of capital in all employments are exactly at the same rate, or differ only so much as, in the estimation of the parties, is equivalent to any real or fancied advantage which they possess or forego. Suppose now that a change of fashion should increase the demand for silks, and lessen that for woollens, their natural price, the quantity of labour necessary to their production, would continue unaltered, but the market price of silks would rise, and that of woollens would fall; and, consequently, the *profits* of the silk manufacturer would be above, whilst those of the woollen manufacturer would be below, the *general and* ADJUSTED *rate* of profits. Not only the profits but the wages of the workmen would be effected in these employments. This increased demand for silks would, however, soon be supplied by the transference of capital and labour from the woollen to the silk manufacture; when the market prices of silks and woollens would again approach their natural prices, and then the usual profits would be obtained by the respective manufacturers of those commodities." *Here* Mr Ricardo fully admits that all deviations from the natural price are *corrected* by the agency *of supply and demand*, by a transference of capital and a consequent increase or diminution of quantity. But the principle which *corrects* such deviations, which *raises*, *depresses*, and ADJUSTS prices to a certain standard, does in reality *fix* and regulate these prices. Why, then, beat about for *another* principle less plain, less intelligible, and which involves contradictions? Why go in search of a new rule, guarded by exceptions and modifications of exceptions, alike destructive of the rule itself, when we have already got all that we want, a plain well known principle, according perfectly with *facts* which come under our daily observation, requiring neither modification nor exception, and accounting satisfactorily and intelligibly for all the phenomena which the science is called upon to explain.

NOTE (B).—BOOK II. CHAP. III.

THERE are some commodities the cost of producing which may be resolved almost exclusively into the value of human labour. The fish and game killed and exchanged by a rude and barbarous people are commodities of this class. The value of the capital employed is very trifling, and the profits of that capital form a small and inappreciable part of the price. Adam Smith has

NOTE B. said (book i. ch. v.) that "in that early and rude state of society, which precedes both the accumulation of stock and the appropriation of land, the *proportion between the quantities of labour* necessary for acquiring different objects seems to be the only circumstance which can *afford any rule* for exchanging them for one another. If among a nation of hunters, for example, it usually cost twice the labour to kill a beaver which it does to kill a deer, one beaver *should naturally* exchange for or be worth *two* deer. *It is natural* that what is usually the produce of two days' or two hours' labour should be worth double of what is usually the produce of one day's or one hour's labour." On this Mr Ricardo founds his doctrine, that "the value of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of labour which is necessary for its production;" and he argues that one beaver, in the case supposed by Adam Smith, will exchange for two deer, *because* twice as much labour is employed in bringing one beaver to market as is employed in bringing one deer to market. What Adam Smith represents as a *rule*, Mr Ricardo assumes as a *cause*.

Now it has been already shown that no commodity, no subject of exchange, can rise or fall in value *in respect of itself*. Labour is a subject of exchange, and two days' labour *per se* must, therefore, always have double the value of one day's labour (of the same kind) *per se;*

but when labour has been *once expended*, worked up, and realized in *another commodity*, the value of *that commodity* in relation to any third commodity, also the product of labour, will depend upon the adjustment of their relative supply.

To test this, suppose that, right or wrong, wisely or unwisely, three-fourths or nine-tenths of the "nation of hunters" betook themselves to the killing of beavers, and that only the remaining one-fourth or one-tenth continued to kill deer, and that double the labour required to kill a deer were still required to kill a beaver. After this great increase of the supply of beavers, would one beaver still continue to exchange for two deer? Assuredly it would not,—most likely the former state of things would be *reversed*, and *one deer* would now exchange for *two beavers.* Those engaged in killing beavers would no doubt have made a most *unprofitable change* of their employment, but still this alteration of the relative values of the animals clearly shows that relative *quantity* and not relative labour is the foundation of exchangeable value. It shows, too, that double the amount of labour was bestowed in killing beavers, *because* the beaver hunters knew that by limiting the number of beavers to one-half the number of deer, they could ensure an exchange on such terms as would remunerate them for their labour.

Labour has nothing to distinguish it from other subjects of exchange, except that it comes *first in order.*

NOTE B.

It is incorporeal and imponderable, and though *measurable*, is what mathematicians would term an *improper quantity*. Of all things it is the *worst fitted* to be a *measure of value*, because *it is not homogeneous*. Of all commodities which may be sold or exchanged, it is perhaps the *least uniform* in *quality*. " It is often difficult," says Adam Smith, " to ascertain the proportion between two different quantities of labour. The time spent in two different sorts of work will not always alone determine this proportion. The different degrees of hardship endured and of ingenuity exercised must likewise be taken into account. There may be more labour in an hour's hard work than in two hours' easy business; or in an hour's application to a trade which it costs ten years' labour to learn, than in a month's industry at an ordinary and obvious employment. But it is not easy to find any accurate measure either of hardship or ingenuity. In exchanging, indeed, the different productions of different sorts of labour for one another, some allowance is commonly made for both. It is adjusted, however, not by any accurate measure, but by the higgling and bargaining of the market, according to that sort of rough equality, which, though not exact, is sufficient for carrying on the business of common life."—*Wealth of Nations*, book i. ch. 5.

Mr Ricardo has *assumed* that labour is the foundation of exchangeable value,—he has not *proved* it. No doubt the comparative *cost of production*, of which labour is always a main *ingredient*, is the *rule* by which the *relative supply* of commodities in the market is *adjusted*, but it is the *adjustment* and not the quantity of labour which *actually fixes* the price; and, accordingly, no sooner does Mr Ricardo leave that very limited class of commodities, which are the *immediate* products of human labour alone, than he is obliged to allow numerous and most sweeping exceptions to his rule.

NOTE (C.)—Book III. Chap. V.

An eloquent modern historian, in a recent publication, has proposed, " That the Bank of England should be authorized to issue one-pound notes *to any extent*, under an obligation to pay them in specie on demand in gold or silver, but at the market price of those metals when presented only."—*Alison's England in* 1815 *and* 1845, *or, a Sufficient and a Contracted Currency*, p. 93.

In support of this proposal, Mr Alison argues anxiously and ingeniously, but not conclusively. He quotes the following passage from Locke: " It is necessary that your gold should be coined and have the king's stamp upon it, in order to secure men in receiving it that there is so much gold in each piece. But it is not necessary that it should have a fixed value put on it by

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public authority." On this passage Mr Alison has the following commentary :—" It is the oblivion of the latter part of the maxim of the philosopher that has produced, and will produce, as long as the present law on the subject subsists, such fatal effects from this obligation to pay in the precious metals. As these metals, by the common consent of men, are the circulating medium of all countries, and bank-notes are issued as representing such medium, and for a profit to the issuers, nothing can be more proper than that, in the ordinary case, they should be under an obligation to take them up with the common currency of men. But nothing can be more unjust, and, in its ultimate effects, ruinous, than that they should be obliged, as they now are, and have been since the act of 1819, to take them up at a *different price for gold* than what it bears at the time in *the market.*"—(*Ib.* p. 58.) Mr Alison had just before remarked (p. 56) : " The test of the paper-currency in circulation being excessive, is not to be looked for in the difference between the mint and market price of gold—*for that only shows the difference in the value of that precious metal* AT THE TIME THE MINT PRICE WAS FIXED *and the present moment,* but in the enhanced price of commodities, whether paid in bank-notes, silver, or any other currency."

Mr Alison's commentary on Locke, to say the least of it, is not less erroneous than such glosses frequently are; but the words of the text are, notwithstanding, strictly true. At the time Locke wrote, and for a long time afterwards, the currency of this country was based upon silver exclusively—and the value of a guinea fluctuated from 20s. to 30s. Under such circumstances, not only was it "not necessary," but it was not *possible* for government to put a fixed value upon *gold.* But although gold had been the *sole* standard, Locke's doctrine would still have been correct. So long as an ounce of gold is ordered to be coined into L.3, 17s., 10½d., it is not necessary that it should have any other "fixed value put upon it by public authority." The sum of L.3, 17s., 10½d. is *not,* as Mr Alison appears to suppose, an antiquated assize value, put upon gold by Kings and Parliaments at some bygone period of our history. It simply marks *a relation of quantity,* which is eternal—it is *another name* for an ounce of gold—*it is* an ounce of gold—and while the present mint regulations are observed, must be *the price* of an ounce of gold, and cannot cease to be so, any more than a *foot,* ordered to be divided into twelve equal parts, can cease to be equal to *twelve inches.*

But it is unnecessary to pursue the discussion farther. Mr Alison's proposal is not a new one. In march 1819, the Bank of England was applied to by the Lords' Committee to know "whether the Bank had any and what objections to urge against the passing of a law to require it should pay its notes in bullion on demand, but in sums not less in amount than L.100, L.200, or L.300, NOTE C. at L.3, 17s. 10½d., and to buy gold bullion at L.3, 17s. 6d. by an issue of its notes." The answer of the directors was, "The Bank has taken into consideration the question sent by the Committee of the House of Lords, under date of the 24th March, and is not aware of any difficulty in exchanging for a fixed amount of bank-notes, gold bullion of a certain weight, provided it be melted, assayed, and stamped by His Majesty's mint. The attainment of bullion by the Bank at L.3, 17s. 6d. is in the estimation of the court so uncertain, that the directors, in duty to their proprietors, do not feel themselves competent to engage to issue bullion at the price of L.3, 17s. 10½d.; but the court beg leave to suggest, as an alternative, the expediency of its furnishing bullion of a fixed weight to the extent stated *at the market price* as taken on the preceding foreign post day, in exchange for its notes; provided a reasonable time be allowed for the Bank to prepare itself to try the effect of such a measure."

On this Mr Ricardo has remarked, in one of his ablest works (*On Protection to Agriculture*, p. 29), "If this proposal had been acceded to, the Bank would itself have determined the price at which it should have sold gold from time to time to the public, *because, by extending or curtailing their issues, they had the power to make the price of gold just what they pleased,* L.4 or L.10 an ounce, and at that price to which they might choose to elevate it, they graciously proposed to sell it, provided a reasonable time should be allowed to prepare itself to try the effect of such a measure."

It must be obvious that a currency issued on such principles would land us in all the calamities which have followed, and ever must follow, the issue of paper money absolutely inconvertible, and without any of the advantages of such money, for it would be both more expensive and less under control. An act to empower the Bank of England to issue L.1 notes under an obligation to pay them in specie *at the market price* (assuming the market price to fluctuate on the principle stated by Mr Alison), would deserve to be entitled, "An act to enable the Bank of England to compound their debts whenever the state of trade shall render it of more than ordinary importance to their creditors to be paid twenty shillings in the pound."

But the market price of the standard does not, and cannot, so fluctuate.

Much error appears to have arisen from not sufficiently distinguishing between the effect produced by a limited or redundant currency on *the price of bullion*, or the material of money, and the effect produced by such limitation or redundancy on the money price of all *other* commodities.

That the enlargement or contraction of the general volume of the currency, whether purely metallic, or consisting partly of metal, and partly of paper instantly convertible into gold on demand, elevates or depresses

NOTE C. to some extent the market price of gold or the standard, —is a fallacy which, though not very explicitly announced, appears to pervade the reasoning, not only of Mr Alison in the work to which reference has been made, but of Mr Ricardo, in the passage just quoted, and in other parts of his works.—See, in particular, *Proposals for an Economical and Secure Currency*, pp. 10, 11.

As this theoretical error is calculated to lead to fatal practical mistakes, it deserves (although the resumption of the argument may be thought prolix) to be examined with the utmost care.

As matter of historical fact, it will probably be allowed that the *exportation* and *melting* of the coin *never has been* effectually prevented; and, if we are to judge of the future from the past, we may safely affirm that it never *will*, in any country of the world, be effectually prevented. With this fact and this unavoidable inference before us, what we have to consider is, whether the mere *limitation* or *enlargement* of the circulation can be made the instrument of regulating the *price of bullion*, or the material of the money in which that price is estimated?

This question may be brought to a very simple issue. Suppose the circulation to consist of twenty millions of sovereigns of the present standard of our mint, and that by some miraculous process each piece is suddenly reduced by a twentieth part, or 5 per cent., but without any increase or diminution of the total sum in circulation. *After* such a change, although the whole currency would still not exceed twenty millions, the price of gold bullion would assuredly not continue at L.3, 17s. 10½d. an ounce, as it ought to do if the numerical amount of the circulating medium regulates that price, but would rise to L.4, 1s. 9¼d. The least reflection will convince us that it must be so. Nineteen-twentieths of an ounce of gold of standard fineness (instead of a whole ounce) are now equal to $3\frac{143}{160}$ sovereigns or L.3, 17s. 10½d. The case then is this. I put *as many* of these new sovereigns into a melting pot as will produce *an ounce* of gold bullion, and I immediately carry this bullion to the mint to be recoined. How much money do I receive for it? I receive L.4, 1s. 9¼d. THAT SUM, then, is *now* the PRICE of an ounce of gold bullion.

Under the former state of things, 1869 sovereigns were equal to 40 lbs. troy of standard gold bullion. I now put as many of the *new* sovereigns into the melting pot as will make up 40 lbs. troy; shall I sell this weight of bullion (whatever be the total amount of the circulation) for L.1869 of the *new money,* or at the rate of L.3, 17s. 10½d. of that money for each ounce, *when*, by the moderate exertion of carrying the bullion to the mint, I can bring home L.1962, 9s.?—If I can have a pound troy of standard gold *converted* gratis and instantly into L.49, 1s. 2¾d., why should I sell it for L.46, 14s. 6d.? And what difference can it

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make to me *what* the total amount in circulation may be? If I can get L.4, 1s. 9¼d. for an ounce of bullion, I will assuredly not sell it for L.3, 17s. 10½d., whether my neighbours happen to have one hundred pounds or one hundred millions of pounds in *their* pockets.

When the coin is perfect, therefore, and the exportation and melting of it is allowed, it is difficult to discover why the market price of bullion should deviate (either on the one side or the other) from the mint price, by reason of an enlargement or contraction of the circulation. The best mode of testing the effect of mere limitation or *enlargement* on the price of bullion is to suppose the circulation of 20 millions to be *doubled in numerical amount*, and, at the same time, *each coin doubled in weight.* In that case, the price of bullion, on the principles of those who contend that the price of bullion is raised or depressed by the enlargement or contraction of the currency, *must rise* to L.7, 15s. 9d. per ounce, or *twice* L.3, 17s. 10½d. On the contrary, it is obvious that it will *fall to one-half* of L.3, 17s. 10½d., or L.1, 18s. 11¼d. per ounce. I am possessed of two ounces of standard gold. I carry that quantity of bullion to the mint and I receive of the new money L.3, 17s. 10½d., or L.1, 18s. 11¼d. for *each* of the *two ounces.* On the other hand, why should any one give me *more* than L.1, 18s. 11¼d. for an ounce of standard gold, when he can at once obtain that quantity by putting L.1, 18s. 11¼d. of the (new) current coin of the

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realm into a melting pot? The numerical amount of the circulation makes no difference either to the buyer or to the seller of *gold bullion*, which, by the supposition, is the sole material of which the circulating medium is composed.

Again, reverse the case—suppose the numerical amount of the circulation of 20 millions not only *limited to one-half*, or 10 millions, but the coin to be, at the same time, *reduced in weight by one-half.* Then, on the erroneous principle that the price of the material of money depends on the amount of money in circulation, the market price of gold bullion must fall to L.1, 18s. 11¼d. per ounce—it must do so if the money price of gold bullion be regulated by *the numerical amount of the currency.* On the other hand, it is quite certain that the price would rise to L.7, 15s. 9d., if the money price of bullion be regulated by its capability of being converted into coin. The question with the holder of bullion still is, into how much money can an ounce or any other given quantity be converted? After the change last supposed, an ounce can be converted into L.7, 15s. 9d., and THAT, therefore, will be *the price* of gold bullion.

The fallacy we have been examining arises from regarding coin and bullion as distinct commodities, instead of as parts of one and the same commodity, and leads to the important practical error that, when a currency either purely metallic, or partly metallic, and partly consisting

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of paper, convertible into the standard at the option of the holder, becomes redundant, "*it is the melting, in consequence of the high market price at home, and not the exportation*"[*] of a part of the metallic portion, by which the redundancy is corrected. This error once established, the monetary system ceases to be regarded as a self-regulating interest, like the other departments of trade, requiring no care on the part of government, but a rigid maintenance of the standard, and strict care that the issuers of paper shall have in their coffers, or at their command, a sufficient stock of coin or bullion to answer the demands of foreign trade.

No over-issue of paper instantly convertible into gold or the standard can raise the market price of gold bullion, or the material of the coin into which that paper professes to be, and (by hypothesis) actually is, convertible at the mint price. To affirm that it could, would be to affirm a contradiction. But an over-issue of convertible paper (supposing the over-issue of such paper, and the retention of it in circulation to be possible) would by its action on general prices, and, through general prices, on the foreign exchanges, certainly give rise to a drain of specie. Nor would the specie so drained away return till the over-issue were checked and reduced. This would be the only remedy. The only legitimate preventive is the rigid exaction of periodical evidence,

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[*] Blake's Observations on the Course of Exchange, p. 59.

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that the issuers of paper are really possessed of the thing which they engaged instantly to deliver. If they have not the *ipsum corpus*, such engagements are delusive. Gold is the only security for the fulfilment of promises to pay gold *on demand.*

Were the melting and exportation of the coin prohibited, and *successfully* prevented, the limitation of the numerical amount would affect the money price of bullion just as it would affect the money price of ordinary produce. Or if, by the over-issue of *inconvertible* paper, the gold coin is driven out of the market altogether, gold will cease to be the measure of property, and its price will fluctuate like that of other things. Bullion will then become a commodity, and nothing but a commodity. If you shut up the *mint* and the *ports*, and effectually prevent *melting*, you may make pieces of gold or silver, whatever be their weight or fineness, or pieces of paper, or any thing else, perform, in some measure, the functions of money. Coin, by the supposition, cannot then be converted into bullion, for it cannot be melted, and bullion cannot be converted into coin, for the mint is shut up. Coin and bullion are *then* two distinct commodities, and rise or fall in value according as the quantity of either is limited or enlarged; but this is *not money*, it is a *factitious substitute* for money. *It is of the essence of money to possess intrinsic value. Coins* are *parts of a commodity*, the value of which is regulated by the natural laws of trade. Bank-notes are warrants for the instant delivery of coin. *Tokens* or *counters*, whether of metal or paper, issued under a monopoly, and *not convertible* into the commodity which they profess to represent, may be called money, but they are not a measure of the value of property. On the contrary, property becomes a measure of *their* factitious value.

NOTE (D).—Book III. Chap. VIII.

Mr Locke (*Considerations of the Lowering of Interest, &c.*—Works, edition 1722, vol. ii. p. 42), and Dr Adam Smith (*Wealth of Nations*, book i. chap. xi.), maintain that the market price of commodities "is *necessarily higher* when the coin is much debased from clipping and wearing, than when near to its standard value." This error has arisen from not marking the distinction between the consequences of a *depreciated* or *redundant*, and of a *debased* or *degraded* currency.

We have already considered the effect of the degradation or debasement of a metallic currency on the price of bullion; but what we have here to consider is, the effect of such degradation or debasement on the price of commodities *other* than the material of money. A degradation of the standard of the coin (or *raising its value*, as it has been called) cannot raise the money price of commodities *other* than bullion or the material of money, *unless accompanied with an enlargement of the circulation*, for nothing can permanently raise or depress the money price of commodities, but altering the *ratio* of money to commodities.

On the other hand, nothing can permanently raise or depress the money price of *bullion*, but increasing or diminishing the quantity of bullion which the coin contains. Degradation *necessarily* produces the one effect, but it does not necessarily produce the other.

This observation, however, applies only to the case of a purely metallic currency. A gold or silver currency, which is *perfect* according to the mint regulations, may be driven out of circulation by excessive issues of paper-money, or paper not convertible into specie. The precious metals *then* become mere commodities, and their market price depends on the proportion between the supply and demand.

During the first nineteen years of the present century, the currency of this country was the subject of a complication of disorders. *First* of all, we had, to some extent, a *double standard;* for silver was legal tender, by tale, to the amount of L.25, and, by weight, at the mint price, to *any* amount. *Secondly*, the silver coin, prior to 1816, was in a worn out and greatly deteriorated state. *Lastly*, we had the great and overwhelming

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evil, which threw all minor ills into the shade, of a paper-money, not convertible into specie at the option of the holder, and, for that reason, issued in excess.

Prior to 1800, and while the gold coin continued to circulate *along* with the paper-money, the market price of bullion did not exceed the mint price. It was then, to a great extent, driven out of circulation, and gold bullion continued much above the mint price down to the passing of the act for the new silver coinage in 1816. The act was passed in *June* 1816, and in August following standard gold was quoted at L.3, 19s. per ounce. Between 1816 and 1819, when the act for the resumption of cash payments was passed, the market price of gold bullion did not exceed the mint price by so much as 5 per cent., and since 1819 the market price has either coincided with the mint price, or been only a very little below it. In no instance, I think, has it been less than L.3, 17s. 6d.

The *rise in the market price of bullion*, therefore, during the period of the bank restriction, cannot be regarded as a correct *measure* of *the effect produced on the money price of commodities generally* by the redundant circulation of that period. General prices continued down to 1819 to be 40 or 50 per cent. above the average which had obtained prior to 1797, while in 1816 the market price of bullion had been brought down nearly to the mint price, and the disorders of the foreign exchanges had in consequence been rectified, though the new silver coinage then issued was overvalued in respect of the gold coin.

The degradation or debasement of a purely metallic currency, though it will not, *per se*, and unaccompanied by an enlargement of the general volume of the circulation, raise the price of home commodities, will be found always to raise the money price of *imported* products. For instance, were the weight of our gold coin reduced by one-half, the *true par* of all the foreign exchanges would be immediately depressed to a corresponding extent. Foreigners never inquire whether we have a greater or less amount of money in circulation, and they care nothing for the *names* we give to our coins. They regard these coins as so much bullion, valuable only according to their weight and fineness. Before the change we have supposed, if the real par of exchange between London and Paris was 25 *francs* 50 *centimes*, *after* that change, and in consequence of it, it would instantly fall to 12 *francs* 75 *centimes*. *One-half* of the French coin containing the same quantity of metal as our now debased coin, one-half only would be given for the right to receive in England one pound sterling of our new money. After the change supposed, the state of matters in France would be this—their own currency bearing the same proportion to their commodities as before, there would be no alteration of general prices abroad —and their coins being of their full standard weight

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and fineness, the market price of bullion abroad would neither rise nor fall—the only change would be in the course of exchange with England. But if a French merchant who exports wine to England to the amount of L.100, can sell the bill which he draws for that sum on his correspondent in London, for only 1275 *francs*, instead of 2550 *francs*, he must add the remaining 1275 *francs* to the price of the wine, in other words, he must draw for L.200, or the exportation of that commodity must cease. After the change we have supposed, therefore, French wine and all other imported products must rise in the English market to double their former money price. The price of home products would not rise till the volume of the currency were enlarged, but its enlargement would be the immediate and certain consequence of the deterioration of the coin.

NOTE (E).—BOOK V. CHAP. III.

MR HARRIS is of opinion that the money price of bullion may *rise above*, but cannot *fall below* the mint price. " A demand for bills upon a particular place raises their prices, as in other cases; and when these prices have got up to a certain degree above par, *the price of bullion will be also advanced above the standard of the* *country.* For dearness of bills causes a demand for bullion to be exported, *and in proportion of the demand to the stock in the market, the price of bullion will be raised.* To take advantages, when and wherever they offer, is the object and business of commerce. Again, by transporting of bullion the price of bills will be lowered; that again will gradually lower the price of bullion, until the prices of each are again brought to a par. The price of bills may be reduced below par; *but bullion can never be lower than the established standard;* the mint being always open to receive it at the standard or mint price."—*Essay on Money and Coins,* part i. chap. iii. sect. 60.

Mr Ricardo is of an exactly *opposite* opinion:—"*It is the rise in the value of money above the value of bullion* which is always, in a sound state of the currency, the cause of its increase in quantity, for it is at these times that either an opening is made for the issue of more paper money, which is always attended with profit to the issuers, or that a profit is made by carrying bullion to the mint to be coined. To say that money is more valuable than bullion, or the standard, is to say that bullion is *selling in the market under the mint price.* It can, therefore, be purchased, coined, and issued as money, with a profit equal to the difference between the market and mint prices. The mint price of gold is L.3, 17s. 10½d. *If, from increasing opulence, more commodities came to be bought and sold, the first effect would*

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be that the value of money would rise. Instead of L.3, 17s. 10½d. *of coined money being equal in value to an ounce of gold,* L.3, 15s. 0d. *might be equal to that value; and, therefore, a profit of* 2s. 10½d. *might be made on every ounce of gold that was carried to the mint to be coined.* This profit, however, could not long continue; for the *quantity of money* which, by these means, would be *added to the circulation,* would *sink its value,* whilst the *diminishing quantity of bullion* in the market would also tend to *raise the value of bullion* to that of coin : from one or both of these causes, a perfect equality in their value could not fail to be soon restored."—*Proposals for an Economical and Secure Currency,* 3d edition, pp. 10, 11.

With these conflicting opinions before us, we shall not go far wrong if we conclude, that in this case, as in others, *truth lies in the middle.* Mr Ricardo elsewhere says, "*When the number of transactions increase in any country from its increasing opulence and industry*—bullion remaining at the same value, and the economy in the use of money also continuing unaltered—the value of money will rise on account of the increased use which will be made of it, *and will continue permanently above the value of bullion, unless the quantity be increased,* either by the addition of paper, or by procuring bullion to be coined into money."—(*Proposals,* &c. pp. 9, 10.) Mr Ricardo, like Mr Thornton and Mr Blake, does not distinguish sufficiently between the laws which regulate the money price of the material of money and those which regulate the money price of ordinary produce, and concludes with them, that when other things fall in price, the material of money must fall among the rest, and *vice versa*. NOTE E.

Now the *converse* of this proposition will be found to be true; when all other things fall in *price*, money rises in *value*, and bullion and money being parts of the same commodity, rise together; but whilst a metallic currency circulates, and the coin is in a perfect state, the money price of bullion does not vary; "because parts of a commodity cannot rise or fall in value in respect of each other." For if the mint be open to receive bullion and coin it into money, what matters it to the man who has a pound troy of standard gold *whether other men are rich or poor*, whether there be general opulence or general poverty,—*he* can always, and under all circumstances of public depression or prosperity, get his pound weight of gold converted into L.46, 14s. 6d. Why should he part with that quantity of gold for L.45 because *other* commodities have fallen in price? What has the money price of commodities to do with the *conversion* of his bullion into coin? What has the price of indigo or broadcloth to do with the cutting of 40 lbs. troy of standard gold into 1869 pieces? If 40 lbs. of gold bullion can be at once, and without cost, coined into 1869 sovereigns, *an ounce* of the same bullion, or a 480th part of 40 lbs., will always be equal to a 480th

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part of L.1869, or $3\frac{143}{160}$ sovereigns, or L.3, 17s. 10½d., and cannot fall to L.3, 15s., unless a whole shall cease to be equal to all its parts.

An ounce of gold *freely* and *instantly* convertible into L.3, 17s. 10½d., when sent to the mint, or capable of discharging a foreign debt of L.3, 17s. 10½d. when sent abroad, will never be exchanged for *less* than that exact sum. If the mint shall coin an ounce of gold into L.3, 17s. 10½d., and return only L.3, 15s. 0d. to the person who carries that gold thither, this is simply to charge a seignorage of 2s. 10½d. an ounce, and in *that case* the market price will certainly fall to L.3, 15s., because a seignorage acts in the same way as *delay*, or *expense* of *transit*, or any other *clog* on the free convertibility of bullion into money. To the extent of the loss which a seignorage entails on the holder of bullion, and to no greater or less extent, it keeps the market price below the mint price. Add the seignorage to the market price, and the mint and market prices will always coincide.

The answer, then, to Mr Ricardo is, that the market price of the material of money cannot fall *below* the mint price in any country where the free and gratuitous convertibility of bullion into coin is secured; because no man will consent, whatever be the state of general prices, to sell for L.3, 15s. a commodity which he can have instantly converted into L.3, 17s., 10½d. The answer to Mr Harris, who thinks that the market price of the

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material of money may rise *above* the mint price although it cannot sink below it, is, that in a country where a metallic currency circulates, no one who can obtain an ounce of gold by simply melting down $3\frac{143}{160}$ sovereigns will consent to pay for that quantity L.4, L.4, 10s., or any higher sum than L.3, 17s., 10½d.

But it may be said—suppose that private individuals, for some reason or other, no matter what, are averse to bring in bullion to the mint, what resource is left to those charged with the maintenance of the currency of the country, but to tempt such individuals to do so by offering to pay for bullion a price higher than the mint price? And in that case what becomes of the doctrine, that while the mint is open, the proper regulations observed, and bullion freely and instantly convertible into money, the market and mint prices do always coincide? Now a little reflection will serve to explain this. The bank, we shall suppose, has an immediate demand for sovereigns, and offers to pay L.4 or L.5, as the exigency may require, for every ounce of gold bullion brought to be coined. Gold coin must be had, and if it cannot be got at the mint price, a higher price must be given for it. All this is plausible enough; but we must take care not to use *words* without clearly understanding their *meaning*. What then mean the terms "L.4 or L.5?" Certainly not 4 or 5 *sovereigns*, for gold coin is *the thing wanted*, and no man will give 4 or 5 sovereigns for as much gold as will yield only

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$3\frac{147}{100}$ sovereigns. "Four or five pounds," therefore, must mean something else than four or five sovereigns; and if what is meant be L.4 or L.5 in *paper* or *silver*, then it is the paper or silver which is depreciated, and not gold bullion which has changed its value in relation to gold coin. If government or the bank, in attempting to promote the public interest, shall purchase gold bullion for more than its corresponding weight in sovereigns; private people, to promote their own interest, will certainly melt down the sovereigns so issued, and sell the metal of which they are composed at the higher market price.

But it is unnecessary to pursue this discussion farther, because it can be shown that when a metallic currency is perfect, as to weight and fineness, however much its bulk and volume may be contracted, the exigency which should induce the issuers of money to pay more than the mint price for bullion never can arise.

The following hypothetical case will, I think, explain how a purely metallic currency can be maintained, a redundant currency reduced, and a deficient or contracted currency enlarged, while the market price of bullion neither exceeds nor falls short of the mint price.

Suppose the currency of this country to be exclusively metallic, and to be reduced by one-twentieth, or 5 per cent. in numerical amount. An American wishes to purchase 100 *packages* of our goods (no matter what), which before the contraction of our currency he could have bought for 487 dollars (in gold $48\frac{7}{10}$ eagles), or rather such an amount of British money as he could have had coined from this sum. The contraction of the currency depresses general prices by 5 per cent. Commodities are of less value in relation to money; and money is of greater value in relation to commodities, by one-twentieth. We lay aside, for the present, the consideration of bills, and the course of exchange; and it will be seen that the question which the foreigner has to consider is simply whether he can buy the 100 packages of goods which he wants in the English market *cheaper* by sending to Great Britain American money or American goods. This question might be answered summarily, by saying that the foreigner will send us what bears the greatest value in our market; but in order to obtain clear and definite ideas, it is necessary to carry the analysis farther. Consider then that our money in relation to the goods in our markets is now reduced by 5 per cent., and that general prices have fallen to a corresponding extent. If the American sends ordinary produce to England, that produce becomes a part of the mass of commodities in our market which are exchanged against our contracted currency, and such produce, therefore, will partake of the general depression of prices. The 100 packages which the American wants to buy are now sold for L.95 instead of L.100. He converts, we shall suppose, his dollars into 100 *bales* of

American goods, which before the change sold here for L.100; but after the currency has been contracted they will fetch only L.95. For this sum of L.95 the American can purchase the 100 *packages*, but then he is no better off than he was before—he gains nothing by the fall of prices here. Not so if he send his 48$\frac{7}{10}$ eagles (equivalent to 487 dollars) in hard cash, for these coined into our money will purchase 105 packages at the reduced price. It is therefore the interest of the foreigner to send money rather than commodities, for it makes a difference of 5 per cent. in his favour—he gains the rise in the value of our money, and saves the fall on the value of his goods.

Again, if, in the circumstances supposed, an English merchant wished to purchase 100 bales of American goods, which before the contraction of our currency he could have purchased for L.100, or rather with such a sum of American money as he could have had coined from 100 sovereigns, it is *his* interest, after that change, *not* to send *money*, but to exchange his L.100 here for 105 *packages* of goods, and export these goods, and continue such exportations until the increased supply of our goods in the foreign market shall cause the price to fall there by 5 per cent., after which it becomes a matter of indifference whether he send money or goods.

But by the continued importation of money into England and the stoppage of the exportation of money *from* England, the price of our goods would be again raised 5 per cent.—105 packages would again exchange for

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L.105;—100 bales would again exchange for L.100, and it would cease to be the interest of the foreigner to send money in preference to goods, because money would cease here to be of higher value in relation to goods, and goods would cease to be depreciated in relation to money.

It is thus seen that, apart from any deviation of the market from the mint price of *bullion*, and when a metallic currency is in a sound state, though contracted, the course of trade holds out an irresistible inducement to the holders of bullion to bring it to the mint to be coined, and that it is the rise in the value of money *in relation to commodities*, not in relation to bullion, which, "in a sound state of the currency, is the cause of its increase in quantity."

NOTE ON AMERICAN MONEY, p. 274.

THIS note was designed for insertion at p. 265, in order to guard against the reader's confounding the common coined dollar with the gold dollar of account in the subsequent exchange statements. It is not, however, altogether out of place where it stands (p. 274), being in some measure illustrative of the transition from a silver to a gold standard in the United States. The progress of a similar transition which took place in our own country in the last century is described in *the Earl of Liverpool's Treatise on the Coins of the Realm.*

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